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ABSTRACT

The Migrant Student Record Transfer System (MSRTS) is a nationwide computer-based communications network originally designed to transfer the health and educational records of migrant workers' children. This report assesses MSRTS data from September 1984 through June 1986 to determine the potential utility of such data for national studies of the Migrant Education Program (MEP). Findings include: (1) 51% of currently migrant students were enrolled in only one MEP school during the period; 27% were enrolled twice; (2) recruitment and enrollment of currently migrant students were least successful in Eastern Stream states; (3) only 46% of all enrolled eligible children received services funded by MEP; (4) MSRTS achievement test data were not nationally representative of MEP participants and could not be used for a valid national study of MEP student achievement; and (5) frequent retesting of migrant children could have produced test wiseness and invalid test scores. Overall, the quality of the data was unexpectedly high, and limitations on analysis arose primarily from missing data due to the voluntary nature of data entry. Existing MSRTS data can be used in analyses that answer educational policy questions about: (1) the population receiving services and the services received; (2) differences in the characteristics and needs of formerly versus currently migrant students; and (3) the relative effectiveness of varying service delivery methods. The gap reduction model and a formative analysis using multiple regression are appropriate models for analysis of MSRTS data. This report contains 46 tables, a sample MSRTS student record, and recommendations for improving MSRTS for research purposes. (SV)

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SYNTHESIS OF AVAILABLE RESEARCH AND DATABASES ON THE MIGRANT EDUCATION PROGRAM

VOLUME II

THE MIGRANT STUDENT RECORD TRANSFER SYSTEM

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We wish to express our gratitude to the members of the Advisory Panel to this project. Their advice assisted us in clarifying the project's objectives and the assistance they provided enabled us to achieve those objectives.

Mr. Troy Rinker, Director, and Ms. Cindy Kane, Chief of Programming of the Migrant Student Record Transfer System, furnished the data extract and assisted with technical support for analyzing the data presented in this report. Without their cooperation this project could not have been performed.

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Finally, we would like to thank Mr. James English, Project Officer for the Department of Education, for his guidance and accommodation to the changing requirements of the project.

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EXECUTIVE SUMMARY

Applied Systems Institute, Inc., under contract to the U.S. Department of Education, conducted an assessment of the data contained in the Migrant Student Record Transfer System (MSRTS). Data were extracted from MSRTS active files for the period of September, 1984 through June, 1986. The analysis focussed on four areas of concern: (1) Enrollment of Migrant Students, (2) Services Provided to Enrolled Migrant Students, (3) the presence of data suitable for measuring academic achievement among enrolled migrant students, and (4) Health Status of Migrant Students.

This summary is arranged in two parts. The first presents an overview of the results of our analyses. This is followed by a summary of our conclusions and recommendations.

I. ANALYTICAL RESULTS

Enrollment of Migrant Students

Comparisons of the 1985-86 academic year, analyzed in this study, with the data for 1977 (RTI, 1981) showed that the total number of students enrolled in the Migrant Education Program (MEP) increased 20 percent, from 371,800 in 1977 to 446,144 in 1986. Without identification of the universe of migrant children, however, there was no way of knowing if this increase resulted from improved recruitment efforts, less stringent identification criteria or from a general increase in the migrant population during that nine year period.

Because the MSRTS database contains records only of *enrolled* eligible children, it could not be used to identify the universe of all migrant children. Nevertheless, statements can be made about the relative effectiveness of identification and enrollment activities, particularly as they effect enrollment of currently migrant children.

The results of ASI's analysis of the MSRTS enrollment data suggest the following:

- The majority (51 percent) of currently migrant students were enrolled in only one MEP project school over a period of two years; 27 percent were enrolled twice.

- Recruitment and enrollment efforts of currently migrant students in the Eastern Stream states were somewhat less successful than in the Western and Midwestern Stream states.

Currently migrant students, being more likely to move than formerly migrant students, as would be expected had a somewhat higher proportion of multiple enrollments. For the two academic years and the intervening summer in this analysis, there were an average of 2.42 enrollments per currently migrant student and 2.11 enrollments per formerly migrant student. These numbers suggest that not only were currently migrant students not being enrolled in receiving districts, they were also not being re-enrolled in their home districts.

Supplemental Program Services

Supplemental program services were provided to 222,959 students from September 1, 1984 to June 15, 1986. The greatest proportion of services were in reading (27 percent) and mathematics (19 percent). An additional 16 percent of services were bilingual and E.S.O.L programs; 11 percent were other types of educational programs; and 27 percent were pupil support services.

Over 431 thousand services were provided in 1985-86 to 184,834 (56 percent) of the 328,144 students enrolled. This amounted to an average of 2.3 services per *served* child. *Less than half (46 percent) of all enrolled eligible children were served with MEP funded services,* while 10 percent were served in programs funded from other sources. Over 143,000 children (43 percent) had no supplementary services recorded in that year.

In 1985-86, the proportion of children receiving any services ranged widely across streams, from a low of 34 percent of formerly migrant children in the Midwestern Stream to a high of 72 percent of formerly migrant children in the Western Stream. Similarly large differences were found for the proportion of children receiving MEP funded services, ranging from a low of 22 percent of formerly migrant children in the Midwestern Stream to a high of 65 percent of the formerly migrant children in the Western Stream.

Migrant Student Achievement

A major purpose of this project was to assess MSRTS to determine the feasibility of using data from this source for a national study of achievement of Migrant Education Program participants. Analysis of test scores was beyond the scope of the project.

The analysis of MSRTS test data indicated that of the 852 tests recorded in MSRTS, ten tests (math and reading versions of CTBS, SAT, CAT, WRAT, ITBS) constituted 60 percent of all test records. The ten tests comprised our sample for analysis.

Although 42 percent of the students had achievement tests recorded, only 5.3 percent had 2 or more complete reading tests and at least one supplemental reading program and 4.1 percent had 2 or more complete mathematics tests and at least one supplemental mathematics program.

From the analysis of test data by stream, grade and migrant status, it was concluded that the *MSRTS data were not nationally representative* of the population of MEP participants and could not be used for a valid and reliable national study of MEP student achievement. The differences in the distribution of students with test data and the distribution of enrolled students, by stream, were meaningfully large as well as statistically significant.

In addition, migrant students were often tested by their new teacher while the teacher waited for the child's records to be received from MSRTS. *Some students had as many as nineteen achievement tests* recorded on MSRTS and *students may have taken the same test up to five times in a two year period.* Under this system, such students may have become test wise and test results were of questionable validity.

Migrant Student Health

The Office of Migrant Education (OME) and the Office of Migrant Health (OMH), of the U.S. Department of Health and Human Services, entered into a working agreement whereby MEP can access health care for an enrolled student at a reduced cost. OME provides comprehensive primary health care to migrant workers and their families in 122 Migrant Health Centers in 35 states and Puerto Rico. Migrant students may also receive health care from a number of other sources.

The MSRTS health record extract was examined to determine (1) the proportion of enrolled students with health records, (2) their usefulness for evaluating the health status of migrant children through analysis of the "unresolved health problems" data, and (3) the completeness of immunization data in the health records. This last step was considered an important issue since most schools in the U.S. will not allow a student to register without documentation of having received certain inoculations.

For the two year period analyzed, MSRTS contained health records for 125,815 students. Currently migratory students were more likely than former migrants to have received health care through the Migrant Health Program.

Aside from reporting routine health screening and patient histories, the health records provide information concerning continuing acute and chronic health problems of migrant students. This alerts the personnel at the receiving school to any potential health problem that might require immediate attention or interfere with the students educational progress. There was no way to determine the severity or the extent to which the health problems listed in MSRTS interfered with educational participation. Nine percent of the students with health records had unresolved health problems: currently migrant students, 5 percent; formerly migrant students, 4 percent.

The Migrant Health Program provides prophylactic immunizations to migrant children against a number of diseases. The most common immunizations were for Polio, Diphtheria, Pertussis and Tetanus (DPT), Measles, Rubella and Mumps.

Because migrant children can receive immunizations from multiple sources, in addition to MEP Health, and these are not necessarily recorded in MSRTS, there is no way to determine the proportion of children with inadequate immunization.

CONCLUSIONS AND RECOMMENDATIONS

The MSRTS was designed for purposes other than research. MSRTS does have the potential to become a powerful research and reporting tool, capable of being used to perform national, state, and local MEP evaluations. The data contained in the system can provide suggestive answers to a number of important policy questions, but a number of factors limit its usefulness for both research and reporting.

The analysis conducted for this project showed that the quality of the data entered was unexpectedly high. The limitations on analysis were primarily in the form of missing data. *The most limiting factor in the MSRTS is the voluntary nature of data entry.* A number of other factors were identified which had a limiting effect on entry of data into the system and the usefulness of the data that is entered.

The existing MSRTS data can be used to conduct analyses that answer policy relevant questions such as (1) who was being served and what services were they receiving, (2) what are the differences in the characteristics and needs of formerly compared to currently migrant students, and (3) what is the relative effectiveness of varying service delivery methods.

The effect of the Migrant Education Program on academic achievement can be determined by comparing the results of the test scores of students who have received supplemental services through MEP with the scores of a comparison group of MEP students not receiving supplemental services. However, the MSRTS data analyzed in this project were found to be biased and not nationally representative. It can, therefore, only be used, in its present state, for suggestive studies of student outcome.

The analytic model selected for evaluating the MEP should allow for the inclusion of the greatest number of cases without jeopardizing the validity of the analysis. Since many different achievement tests were employed by the states and LEAs, a model requiring that a single test be administered would yield a sample too small to be considered national in any meaningful sense. *Two models were determined to be appropriate choices for use with MSRTS data: the Gap Reduction Model and a Formative Analysis using multiple regression.* The two models are described in the text of the report.

The following five recommendations for improving MSRTS for the purposes of national state and local level reporting and research are based on the identified limiting factors and discussions with MSRTS, SEA, LEA and Technical Assistance Center personnel.

1. The only way to obtain sufficient national data on the educational experience of all MEP students is through the *full use of MSRTS.* Only full use of MSRTS would make it a meaningful planning and evaluation tool for local and state program administrators for conducting evaluations and large scale needs assessments or for a national evaluation. Therefore, a system of incentives must be established to encourage the entry of participation and achievement data into the system.

2. The MSRTS goal of on-line data entry at the LEA or Project level, via personal computers, is not only admirable, but essential to improving the data collection system. The current system of data entry by clerks at centralized locations leads to inordinate delays in the system, and these delays, in turn, discourage full use of MSRTS. Interactive on-line entry and retrieval will greatly improve the timeliness of information exchange, increase perceived value of the system for teachers and MEP administrators, and result in a higher level of participation. Furthermore, the quality of the data entered in MSRTS could be improved by developing interactive programs which would allow only valid entries into the system.

3. Coordination of MSRTS with states which maintain separate achievement databases would enhance the representativeness of the data in the system. MSRTS should encourage the sharing of these data.

4. A universal testing date for all MEP students, regardless of geographic location on that date should be established. This would ensure that (a) all students would be tested each year, (b) students would not need to be tested every time they move, and (c) testing cycles for evaluation purposes would be standardized across the country.

5. Given that six tests accounted for almost two thirds of the tests recorded in MSRTS, greater use any of the tests analyzed in this study should be encouraged. This would assist in (a) establishing a database with more universal and usable achievement data for teachers, and (b) broadening the base for analytical purposes.

TABLE OF CONTENTS

I. INTRODUCTION 1
- A. The Migrant Education Program 2
- B. The Migrant Student Record Transfer System 3
- C. Previous Studies of MSRTS 3

II. ARRANGEMENT OF THIS REPORT 7

III. USES OF MSRTS AND RECOMMENDATIONS 12
- A. Uses of MSRTS Data 13
- B. Recommendations 17

IV. RESULTS 21
- A. Enrollment of Migrant Students 22
- B. Supplemental Program Services 26
- C. Migrant Student Achievement 33
- D. Migrant Student Health 45

TECHNICAL APPENDIX 1
- A. Analysis of Enrollment Data 2
- B. Procedures for Analysis of Test Data 3

APPENDIX A: PROPORTIONS OF STUDENTS RECEIVING SUPPLEMENTAL SERVICES AND MEP FUNDED SERVICES BY MIGRANT STREAM AND STATUS AND BY GRADE. 1

APPENDIX B: ACHIEVEMENT TESTS PER STUDENT BY GRADE 1

APPENDIX C: ACHIEVEMENT TESTS PER STUDENT BY MIGRANT STATUS 1

APPENDIX D: SAMPLE MSRTS STUDENT RECORD 1

LIST OF FIGURES AND TABLES IN MAIN SECTION

Table	Description	Page
Figure 1	The Migrant Streams	10
Table 1	Number of Enrollments by Migrant Stream and Status: Sept 1984-June 1986	23
Figure 2	Migrant Students by Stream and Status: Sept 1984 - June 1986	24
Table 2	Number of Students by Migrant Stream and Status: Sept 1984 - June 1986	25
Table 3	Number of Enrollments Per Migrant Student: June 1984 - Sept 1986	27
Table 4	Number of Services Provided by Migrant Stream and Status	29
Figure 3	Percent of Students Receiving Supplemental Program Services and Migrant Funded Supplemental Services, by Migrant Stream and Status: Sept 1985 - June 1986	30
Table 5	Number and Percent of Enrolled Students Receiving Supplemental Services and MEP Funded Supplemental Services by Migrant Stream and Status: 1984 - 1986 and 1985 - 1986	31
Table 6	Students with Achievement Test Records by Grade, Migrant Stream and Status	35
Table 7	Students with Two or More Complete Test Records by Grade, Migrant Stream and Status (Reading)	37
Figure 4	Distribution of Students with Two or More Complete Reading Test Records, by Migrant Stream and Status	38
Table 8	Students with Two or More Complete Test Records by Grade, Migrant Stream and Status (Math)	39
Figure 5	Distribution of Students with Two or More Complete Math Records, by Migrant Stream and Status	40
Table 9	Students with Two Usable Reading Achievement Tests and a Reading Supplemental Program by Grade, Migrant Stream and Status	41
Table 10	Students with Two Usable Math Achievement Tests and a Math Supplemental Program by Grade, Migrant Stream and Status	42
Table 11	Number of Students with Health Records by Migrant Stream and Status: Sept 1984 - June 1986	46

Table 12 Number of Students with Unresolved Health Problems by Migrant Stream and Status: Sept 1984 - June 1986 48

Table 13 Number of Immunizations by Type of Immunization, by Migrant Stream and Status 50

LIST OF TABLES IN TECHNICAL APPENDIX

Table	Description	Page
Table T-1	Number of Major Achievement Tests Reported on MSRTS and Number of Individuals Represented by These Tests	T-6
Table T-2	Test Score Types Recorded on the MSRTS Database	T-8
Table T-3	Testscore Types	T-9
Table T-4	Percent of Achievement Tests with Valid Data Entries for Test Forms, Levels and Scores	T-11
Table T-5	Achievement Tests with Invalid Data Entries for Test Forms and Level	T-12
Table T-6	Test with Complete Data Fields	T-13
Table T-7	Number of Complete Test Records by Test Type	T-15

LIST OF TABLES IN APPENDICES A-D

Table	Description	Page
	Appendix A	
Table A-1	Percent of Students Receiving Supplemental Program Services by Grade and Status: Eastern Stream; Sept 1984 - June 1986	A-2
Table A-2	Percent of Students Receiving Supplemental Program Services by Grade and Status: Midwestern Stream; Sept 1984 - June 1986	A-3
Table A-3	Percent of Students Receiving Supplemental Program Services by Grade and Status: Western Stream; Sept 1984 - June 1986	A-4
Table A-4	Percent of Students Receiving Supplemental Program Services and Migrant Funded Supplemental Services by Grade, Migrant Stream and Status: Eastern Stream; Aug 1985 - June 1986	A-5
Table A-5	Percent of Students Receiving Supplemental Program Services and Migrant Funded Supplemental Services by Grade, Migrant Stream and Status: Midwestern Stream; Aug 1985 - June 1986	A-6
Table A-6	Percent of Students Receiving Supplemental Program Services and Migrant Funded Supplemental Services by Grade, Migrant Stream and Status: Western Stream; Aug 1985 - June 1986	A-7
	Appendix B	
Table B-1	Number of Tests per Student by Grade Cat-Reading	B-2
Table B-2	Number of Tests per Student by Grade CTBS-Reading	B-3
Table B-3	Number of Tests per Student by Grade ITBS-Reading	B-4
Table B-4	Number of Tests per Student by Grade SAT-Reading	B-5
Table B-5	Number of Tests per Student by Grade WRAT-Reading	B-6
Table B-6	Number of Tests per Student by Grade	B-7
Table B-7	Number of Tests per Student by Grade CTBS-Math	B-8
Table B-8	Number of Tests per Student by Grade ITBS-Math	B-9
Table B-9	Number of Tests per Student by Grade SAT-Math	B-10
Table B-10	Number of Tests per Student By Grade WRAT-Math	B-11

Appendix C

Table C-1 Number of Tests per Student by Migrant Status CAT-Reading C-2

Table C-2 Number of Tests per Student by Migrant Status CTBS-Reading C-3

Table C-3 Number of Tests per Student by Migrant Status ITBS-Reading C-4

Table C-4 Number of Tests per Student by Migrant Status SAT-Reading C-5

Table C-5 Number of Tests per Student by Migrant Status WRAT-Reading C-6

Table C-6 Number of Tests per Student by Migrant Status CAT-Math C-7

Table C-7 Number of Tests per Student by Migrant Status CTBS-Math C-8

Table C-8 Number of Tests per Student by Migrant Status ITBS-Math C-9

Table C-9 Number of Tests per Student by Migrant Status SAT-Math C-10

Table C-10 Number of Tests per Student by Migrant Status WRAT-Math C-11

Appendix D

Sample MSRTS Student Record D-2

I. INTRODUCTION

The Office of Planning, Budget and Evaluation, Department of Education (OPBE) is planning to conduct an evaluation of the academic achievement of participants in the Migrant Education Program. Previous evaluations have lacked a national perspective, in part, due to the differing methods employed by the states both in conducting their programs and in performing their own evaluations of these programs.

States, and even districts within the same state, often varied in the types of data collected, the rigor with which the data were collected and the amount of data collected. For example, among the 21 states that reported data on standardized achievement tests for 1984-85, to the Office of Migrant Education, six common published tests were used. Further, some of these states had developed their own tests or used variants of the major tests, with scores reported in a number of different forms. Still other states reported on the objectives mastered by program participants, while others reported teacher assessments. Further, because release of these data were voluntary on the part of the states, only about 35 states reported some form of achievement data in their state reports to the Office of Migrant Education. As a result of this diversity, previous studies have consisted of state by state summaries or vignettes that could not be aggregated to form a national picture of the overall performance of the Migrant Program.

As a first step in the process of planning a national study, OPBE thought it prudent to determine whether sufficient data already existed for such a study or if a primary data collection would be necessary. This study was the result of that first step. The purpose of this study was to assess (1) the Migrant Student Record Transfer System (MSRTS) and (2) national, state and local databases, to determine the feasibility of using data from these sources for a national study of achievement of Migrant Education Program participants.

This volume reports the results of the assessment of the MSRTS. Results of the review and synthesis of national, state and local databases are reported in Volume II.

A. The Migrant Education Program

The Federal Migrant Education Program (MEP) began in 1966 with the enactment of public law 89-750. This law expanded the scope of prior education acts and, for the first time, provided for the establishment of programs specific to the special needs of the children of migratory workers. In the following year the law's coverage was expanded to include the children of former migrant workers as well. Subsequent legislation further expanded the migrant program to meet the needs of preschool children and the children of migratory fishers.

Today, the migrant education program is the largest of the state administered federal education programs. Central direction is provided by the Department of Education, Office of Migrant Education. Each state directs its migrant education projects by operating projects directly or by providing grants to Local Education Agencies (LEAs) and to other service organizations.

Regulations require that migrant program services and funds be supplemental to services provided by state and local funds. These services may be educational or supports to education that are necessary to enable eligible migrant children to take part in and benefit from the educational services.

B. The Migrant Student Record Transfer System

MSRTS is a nationwide computer-based communications network originally designed for the purpose of transferring the health and educational records of the migratory children of migrant workers. As a central data facility, it also serves as a primary link between the Department of Education and the state programs and as a conduit for inter- and intra-state coordination.

The MSRTS system was designed by the Arkansas Migrant Education Program and the University of Arkansas State Medical Center. Originally, the MSRTS and the medical center shared the same computer, with MSRTS as a secondary user. In 1973, as a result of expansion of the system, MSRTS obtained a separate computer, facility and staff. Since 1973, several technical improvements, such as interactive computer terminals and micro computers, have been added to the system to further enhanced its utility. Today, the interactive mode is the most common form of data entry. An MSRTS information Center was opened in 1984 to provide an interface between the MSRTS technical staff in Little Rock and system users. It is expected that within three years all schools in the network will be linked to Little Rock by micro-computer.

In performing its primary function of student record transfer, student's records are sent to an MSRTS data entry facility and transmitted to the mainframe computer located in Little Rock, Arkansas. Receiving schools (those to which migrant students move) request the child's records from MSRTS and they are then sent, by mail, to the receiving school.

Many states indicate that they rely on MSRTS for the system's secondary uses: needs assessment, project evaluation, special reports, guidance and counseling, etc. Other states, however, lack the staff with the technical expertise to make full use of the system. In addition the Department of Education (ED) relies heavily on reports generated by MSRTS to evaluate the state programs and the goals that ED has set.

C. Previous Studies of MSRTS

Within the last 15 years several studies have been conducted either to evaluate MSRTS or to use MSRTS data for secondary analyses. The Exotech Systems (1974), Research Triangle Institute (RTI) (Cameron, 1981), Powell and Associates (1985) and NASDME (1988) studies examined the viability of recording forms and use of MSRTS by MEP personnel at the state and project level. Two studies, Johnson (1987) and Hackett

(1986), described the use MSRTS for research purposes. The findings of these studies are summarized below.

Exotech Systems included an assessment of MSRTS in its 1974 national evaluation of MEP. The report pointed out many weakness of MSRTS and, although many have been corrected or improved, several problems continue to plague the system. Concerns about the timeliness of record transmittal have been responded to by MSRTS and response time has been improved. The format of the records (formerly called "green monsters") was also changed. The extent to which MEP project personnel used the records and concerns about the accuracy of the information contained in the records were then, and still are, common concerns. These and other problems were perceived as, at least partly, due to a lack of (1) proper management and control of the system, (2) use of independent evaluators, and (3) competition and central direction from the then Office of Education.

The RTI "Study of ESEA Title I Migrant Education Program," found problems in the data:

> "...variation in the quality and quantity of data entered into the system about individual students at various state, regional or local levels was so great that it was not safe to rely on these data exclusively for any particular item of analytic interest."

MSRTS was in the awkward position of being viewed as responsible for the completeness and accuracy of the data, but was lacking the authority to guarantee its collection.

Powell and Associates (1985) conducted a survey of the MSRTS for the Texas Migrant Education Office. The study reviewed the utilization of MSRTS by its primary user groups: teachers, counselors, school nurses and data entry specialists. The results indicated that users of the system found the information useful. The survey also solicited opinions on the new revised 1983 version of the MSRTS form. Results indicated that, while the records were not perfect, they were an improvement over the old system.

NASDME recently conducted a nationwide study of MSRTS utilization. Data were analyzed to determine whether differences in data collection, entry and use existed on the basis of differences in school term, health versus education records, sending versus receiving states, and by characteristics of respondents. Preliminary findings suggest that the timeliness of the system had been improved and although there are still problems, these were generally found at the Certificate of Eligibility and enrollment end of the process, not in processing record requests. Survey respondents indicated that a definite need exists for all parts of the MSRTS record and that the forms were an improvement over the older forms. The positive results of the NASDME survey were clouded by the fact that only 50 percent of the respondents were making full use of the MSRTS records.

Two studies, Johnson (1987) and Hackett (1986), attempting to use MSRTS data for secondary analysis of student achievement encountered similar problems. MSRTS was not designed as a research tool and therefore had a number of limitations related to such use. For example:

- Control group information was not part of the data base.
- Student achievement test scores were submitted in a number of forms including percentiles, raw scores or grade equivalent scores. The increasing tendency in recent years to submit Normal Curve Equivalent scores was, however, voluntary and many states had not made the transition.
- Submission of data other than enrollment data was voluntary.

The effect of these limitations could be seen in the 1987 study conducted by Fred Johnson of Oneonta State University of New York. When selection and statistical controls were applied to an original sample of 14,415 enrollments of third and fifth graders in eight states, all but 2,200 enrollment records were rejected from the analysis. Johnson's choice of the TIERS Model A-1, a program evaluation model designed for use with Title I projects, may have dictated his result. Some of the data requirements of the model are not systematically reported to MSRTS, nor were they intended to be.

In summary, the history of MSRTS has been marked by expansion in both size and the variety functions it is expected to perform. Revision of forms, increased use of computer technology and other additions to the system have increased the system's ability to respond to increasingly various local, state and federal needs for information. Nevertheless, MSRTS still has a number of limitations. Limitations such as less than complete utilization of the records and inconsistent and incomplete recording of data are a direct result of the voluntary nature of participation in the system.

Despite the limits documented in previous studies, there is a wealth of data in MSRTS records. It was the goal of this study to assess whether MEP policy questions could be addressed with these data. The remainder of this report presents the results of our analysis assessing the use of MSRTS data for addressing major MEP policy issues in four main areas: (1) identifying eligible students, (2) serving eligible students, (3) program outcomes, including academic achievement and (4) health outcomes of eligible students. For each area we analyzed the data in MSRTS to assess whether they were sufficiently complete and representative to answer the following:

- Do Migrant Education Programs properly identify and enroll all eligible migrant children?
- What proportion of identified eligible migrant children receive supplemental educational programs funded under MEP? funded under other supplemental program funds?

- Does the provision of MEP funded educational services have a measurable effect on the academic achievement of migrant children?

- What proportion of enrolled migrant students receive health services from the Office of Migrant Health of the U.S. Department of Health and Human Services? What is the health status of these students?

II. ARRANGEMENT OF THIS REPORT

In this Chapter, we describe the sample and the organization of the remainder of this report. Chapter III presents a discussion of the potential uses of MSRTS data in different evaluation models and our recommendations for improvements which would enable the system to achieve its potential. Chapter IV of this report presents the detailed results of our analyses. Chapter IV is arranged in four parts. The first addresses the enrollment of migrant students. This is followed by a discussion of the provision of supplemental services and MEP funded services to participating migrant children. The third section is an assessment of the adequacy of the MSRTS data for measuring the effects of MEP participation on academic achievement. The final section reports the results of our examination of the MSRTS student health records. The Technical Appendix describes the criteria and procedures used in our analyses of the MSRTS data.

The MSRTS data in this report are presented according to the migrant status and migrant stream of the participants. Migrant status is a classification describing (a) the occupation of the student's parents (agriculture or fishing) and (b) both the recency of and the interstate or intrastate status of their last qualifying move. Migrant stream refers to the broad geographic are in which a migrant student and his/her family move for seasonal labor and education.

Migrant Status

A number of important questions in migrant education revolve around differences between formerly migrant children and currently migrant children.[1] It was therefore essential to assess the differences in data associated with migrant status in order to evaluate its representativeness for a national study. For example, it was hypothesized that because formerly migrant children would be more likely to attend a single school than currently migrant children there would (a) be *less need* to transfer their academic data, and (b) less reason for entering their data in MSRTS. Therefore, currently migrant children would have more complete data. To examine this, and other potential data biases associated with status, the tables in this report contain separate columns for currently and formerly migratory children.

There are six categories of migrant status: (1) current interstate agriculture, (2) current intrastate agriculture (3) former agriculture, (4) current interstate fishing, (5) current intrastate fishing and (6) former fishing. Almost all migrant students (98 percent) are the children of agricultural workers. Migrant students, whose parents work in fishing, are a small part of the migrant student population; comparisons between the fishing and agricultural segments of the student population would yield little meaningful information. Analysis and reporting were therefore restricted to data comparisons between currently and formerly migrant.

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[1] A "currently migratory" child is a child whose parent(s) or guardian(s) have moved in the past year across school district boundaries is search of seasonal or temporary work in fishing or in an agriculturally related activity. A "formerly migrant" child is a child who has been eligible for participation in the Migrant Education Program within the last five years but is no longer currently migratory.

Migrant Streams

Tracing the patterns of migratory movements over time led to the identification of three major patterns of migration or migrant streams: East, Midwest and West. The states that are included in each of these streams are presented in Figure 1.

Migrant education is a cooperative, not a competitive process. A student may receive part of his education in one state, another part in a second state and may be given an achievement test in still a third state. Since, at least for currently migrant students, no single school district (or state in the case of interstate migrants), is totally responsible for the education of a migrant student, presenting the data by migrant stream has the advantage of reflecting the actual conditions of the migrant educational experience.

Analysis of Achievement Test Data

The data tapes obtained from MSRTS were analyzed using SAS programs. No analyses of student achievement were performed. The analyses presented in this report were, for the most part, conducted to determine the suitability of the data for use in a national study of migrant student achievement. Frequency distributions and cross-tabulations were prepared to determine the number of usable cases contained within the MSRTS database.

The definition of student achievement used for this study was: the acquisition of skills or knowledge, through an educational experience or process, as measured by a standardized achievement test.

The Sample of Enrollments and Students

All of the data used in the analyses presented in this report were obtained from MSRTS active files. An extract program was employed to retrieve all student records, for the academic years 1984-85 and 1985-6 and the intervening summer, that were entered into the system as of February 15, 1988. Enrollments and supplemental programs beginning before the selected time period, but continuing into it, were included in this analysis. All personal identifiers were removed from the data prior to their release by MSRTS.

FIGURE 1

THE MIGRANT STREAMS

EAST	MIDWEST	WEST
Alabama	Arkansas	Alaska
Connecticut	Illinois	Arizona
Delaware	Indiana	California
District of Columbia	Iowa	Colorado
Florida	Kansas	Idaho
Georgia	Louisiana	Montana
Kentucky	Michigan	Nevada
Maine	Minnesota	New Mexico
Maryland	Missouri	Oregon
Massachusetts	Nebraska	Utah
Mississippi	North Dakota	Washington
New Hampshire	Ohio	Wyoming
New Jersey	Oklahoma	
New York	South Dakota	
North Carolina	Texas	
Pennsylvania	Wisconsin	
Puerto Rico		
Rhode Island		
South Carolina		
Tennessee		
Vermont		
Virginia		
West Virginia		

It is important to note that the MSRTS database is in a constant state of flux. The data presented in this report reflect the number of records stored on MSRTS at the time that the extract program was executed: February 1988. Records of students that showed no activity for two years had been removed from the active file and transferred to an archive history tape. Records used in this analysis were the records of only those students who were still considered active participants in the migrant program as of February, 1988. MSRTS archival history files contained the records of an additional 118,881 students who had participated in the program during the period 1984-1986, but were classified as inactive at the time of our extract.

III. USES OF MSRTS AND RECOMMENDATIONS

A. Uses of MSRTS Data

The existing MSRTS data can be used to conduct analyses that answer policy relevant questions. For example, analyses could be designed that would measure the relative effectiveness of various treatments and service delivery forms. Studies could be designed to answer many of the policy issues raised in HR5, the omnibus education bill, and by the Department of Education. Answers to questions such as who was being served and what services were they receiving can be addressed with existing data. Differences in the characteristics and needs of former and current migrant students can also be studied with the existing data.

Questions of the relative effectiveness of service delivery methods can also be addressed with existing data. For example, comparisons could be made of the effectiveness of supplemental classroom instruction compared to tutorial instruction. The effect of the Migrant Education Program can be determined by comparing the results of the test scores of students who have received supplemental services through MEP with the scores of a comparison group of MEP students not receiving supplemental services. However, the MSRTS data analyzed in this project were found to be biased and not nationally representative. MSRTS can, therefore, only be used, in its present state, for suggestive studies of student outcome.

Appropriate Evaluation Models

The primary objective of one component of the "Migrant Education Program (MEP) Data Evaluation and Synthesis Project" was to determine whether the data contained in the MSRTS system could be used to answer questions that are both national in scope and of concern to program administrators at the local and state level e.g., What impact has the MEP had on the achievement scores and skills levels of participating migratory children? How can MSRTS data be used and improved to answer questions of policy interest for future studies of migrant program services and outcomes? The purpose of this study was not to answer these questions, but rather to determine whether it would be possible to answer such questions with existing data from MSRTS and other available databases.

Since this was a feasibility study, the primary task was the assessment of the quality of the existing data for use in either a two point pre-post test or multiple point time series design. This assessment depended on a series of assumptions and decisions regarding the criteria for inclusion or exclusion of data. These decisions, in turn, were dictated by the model selected for use future analyses of the data.

The analytic model selected for use should allow for the inclusion of the greatest number of cases without jeopardizing the validity of the analysis. Since many different achievement tests and evaluation models were employed by the states, and many states used several different tests, a model requiring a single test be administered would yield a sample too small to be considered national in any meaningful sense. Two models were determined to be appropriate choices for use with MSRTS data: the Gap Reduction

Model and Formative Analysis using multiple regression. The two models are discussed in the following sections.

The Gap Reduction Model

In addition to descriptive analyses which can be performed using MSRTS data, a summative analysis of students achievement is desirable. Such an analysis would address the question: overall, what are the effects of MEP participation on student achievement. Because, for the time period represented by the data analyzed in this project, an unbiased, nationally representative sample of achievement data did not exist in the MSRTS database, the study would be suggestive, but not definitive.

Among the models considered for such a future analysis was a modification of the Gap Reduction Model, recently adopted for use in evaluating student achievement in bilingual education projects (Tallmadge, Lam and Gamel 1987). The following is a brief description of the Gap Reduction Model, adapted from a document prepared by Gary Echternacht, Director of the Eastern Technical Assistance Center, (May, 1988) for discussion of evaluation criteria for MEP:

- The Gap Reduction Model attempts to quantify the extent that students improve in achievement relative to a comparison group or the national norm. When the comparison group is the national norm, gap reduction amounts to comparing gains made by MEP students with those made by 50th percentile rank students.

- The Gap Reduction Model is conceptually identical to the TIERS Model A. The primary difference is that the resulting statistic in Model A is an NCE gain, while in the Gap Reduction Model it is the Relative Growth Index (RGI). The following is an illustration using nationally normed data and NCE scores for Model A and Gap Reduction, where X is the pretest score and Y is the posttest score:

	Pretest	Posttest	Model A Gain
50th percentile	50	50	
MEP	X	Y	Y-X NCE(Y) - NCE(X)
GAP	50-X	50-Y	

Gap Reduction = (50-X) - (50-Y) = Y - X
Therefore, Model A (NCE) gain = gap reduction.

RGI = Relative Growth Index, where

$$RGI = \frac{\text{MEP Gain - Control Gain}}{\text{Control Gain}} \times 100$$

- RGI is an index of the relative gain of the MEP group compared to the norms group, or comparison group gain. The RGI is based on the gap reduction and measures the degree to which the progress of the project group exceeded or fell short of the comparison group. Because you cannot obtain a ratio for normed pretest and posttest scores (the norm for the control group will always be the 50th percentile), raw or scaled scores must be used for the calculations.

- The Gap Reduction Model's advantages over Model A occur when non-normed tests are used. Criterion referenced tests, and in certain instances, state testing results can be used with the Gap Reduction Model, but cannot be used with Model A. In addition, local, state or regional norms can be used for comparison purposes; the analyst is not limited to national norms.

- The Gap Reduction Model allows only the use of either raw scores or scale scores; normed scores (grade equivalents, percentiles, NCEs) can not be used. NCEs, developed as part of the TIERS Model A-1, can be used *in conjunction* with the results of an applied Gap Reduction Model, to yield a sample large enough for a national study. NCEs represent a Gap Reduction Model "in disguise" since they are calculated on the basis of a treatment group compared to a national normed control group. The Gap Reduction Model performs a function similar to NCEs since a control group is part of the model, but the control group can be either be a national norm or a local group.

Rather than attempt to aggregate MSRTS data from different tests into a single study, the approach used in this study was to treat the data as a series of separate, but replicable, modified Gap Reduction studies. For this reason, data for each type of test were analyzed separately.

Hackett (1986) pointed out that the lack of comparison group within the MSRTS data base limited its usefulness as a research tool. This would be true if a model, such as the TIERS Model A-1 (Tallmadge, Wood, and Gamel, 1981), with strict criteria were used. The Gap Reduction model, however, eliminated the requirement for using national norm scores as the control group. With this approach students who have not participated in any MEP supplemental programs could serve as comparison groups to those who have participated in at least one MEP supplemental education program.

In order to assess the effectiveness of an educational program, assumptions must be made concerning the educational attainment of the target population without the intervention of program. Such assumptions are often called a "no treatment expectation". The primary problem is to decide what the appropriate "no treatment expectation" is. Often evaluators make the assumption that, without a treatment program, the target population will remain at the same level in relation to a normed group. This is known as the equi-percentile expectation. If the treatment group

remains at the same percentile in relation to the norm group then the program has accomplished nothing; the gap between the two groups was not reduced.

Others argue that, without the intervention of the program, the target group may fall farther behind the norm or control group. An equi-percentile assumption would fail to take note of the program's success in maintaining the target group at the same level or in reducing the rate of decline: the patient's relative health might not be improving, but he isn't dying any quicker either.

The Gap Reduction Model can be applied most appropriately to local projects. In these cases the students have taken the same test, have had both a pretest and posttest administered at the known times, and participants in the treatment group have essentially had the same intervention. Other students, not receiving the intervention services, can serve as a control group. Such information is available to the MEP project teacher and the Gap Reduction Model would help the teacher in evaluating project success.

Use of the Gap Reduction Model for a national study of student achievement would produce results with limited interpretive value. A reduction in the achievement gap between MEP supplementary service recipients and other MEP students would indicate that the services generally had a positive effect. The model, however, provides no way to determine which factors or service characteristics were responsible for the reduction. Such questions can only be addressed by a formative analysis.

Formative Analysis

A formative analysis addresses the issue of the effect of various independent variables on the relative achievement levels of MEP students. Generally, the analytical approach would use a multiple regression model, with posttest scores as the dependent variable.

A multiple regression model would yield standardized measures of the relative effectiveness of a number of factors. These standardized measures are called "beta" (B). One beta unit produces one unit of change in the dependent variable. A regression equation of achievement in MEP would appear as follows:

$$\text{Posttest Score} = (B_1)\ \text{Pretest Score} + (B_2)\ X + (B_3)\ Y$$

In this model, the variance among students posttest scores would be predicted by their pretest scores and two other factors: X and Y. The variables X and Y may be dichotomies (yes-no) or interval data (number of days). Some of the independent variables in the MSRTS database which could be used to examine their effect on achievement include students' age, days of supplemental service, number of enrollments, number of moves, summer school attendance, etc. The large size of the database would permit a number of factors to be entered into the equation at one time. However, because different tests of achievement were used, separate multiple regressions would

have to be run for each test. For an independent variable, such as attendance, to be considered as truly having an effect, its statistical significance would have to be replicated across the separate multiple regressions.

These two evaluation models, Gap Reduction and Formative Analysis, served to establish the criteria for inclusion of data in the analysis of the MSRTS achievement test records. These criteria are described in the Technical Appendix.

B. Recommendations

The MSRTS was designed for purposes other than research and reporting. As it currently functions in the MEP, the data contained in the system can provide suggestive answers to a number of important policy questions, but a number of factors limit its usefulness for both research and reporting purposes. MSRTS does have the potential to become a powerful research and reporting tool, capable of being used to perform national, state, and local MEP evaluations.

The most limiting factor in the MSRTS is the voluntary nature of data entry. The analysis conducted for this project showed that the quality of the data entered was unexpectedly high. The limitations on analysis were primarily in the form of missing data.

A number of factors affect entry of data into the system and the data that is entered. Among those that have been identified through discussions with MEP State, regional and local personnel are the following:

Factors Affecting Data Entry

- In many instances, MSRTS data entry clerks are not under direct MEP jurisdiction, or are not paid full-time from MEP funds. Therefore, demands other than for data entry are frequently placed on their time. This, in turn, can result in less than timely entry of data and requests for student records.

- There were less data on formerly migrant students than on currently migrant students in the MSRTS extract. Entry of achievement data for formerly migrant students is often not considered important. The child is not expected to move and the school already has the achievement data needed. Entry of the achievement data becomes a relevant activity only when the student moves and the information is required at another school.

- There is considerable and understandable resistance on the part of the teachers. Data recording is an onerous and time consuming task. When LEAs and/or SEAs each require data in a form different from MSRTS, the teacher may have to spend as much time on record keeping as on teaching.

- Some SEAs, such as Washington, maintain a statewide database of achievement data on all students in the state. They may chose, for a variety of reasons, not to duplicate recording of this data in MSRTS, using MSRTS for recording of other specialized MEP data.

Factors Affecting Data

- Generally, MEP students are tested for placement purposes when they enter a new school or MEP program. Or, they may be tested along with other students when standardized tests are being given to all the students in a state or LEA. In the two year period studied, some students had as many as 19 test score records, but between 58 and 77 percent of the students had only one record on a particular test.

- Analysis of the test cycles was beyond the scope of this project. Among students with two tests, valid data was fairly equally distributed across grades 2-6; alternate year testing did not appear to be an issue. Analysis of the distribution of students with one test, however, may reveal that the vast majority of these MEP students were tested in alternate years.

- Despite the listing of over 852 different tests in the MSRTS database, five tests: the CTBS, SAT, CAT, WRAT, and ITBS, together accounted for 60 percent of all tests recorded. The Texas TEAMS test accounted for an additional 3 percent, for a total of over 336,000 tests. MSRTS staff reported that the TEAMS test recording is currently in quantitative format, rather than the narrative format used in the period analyzed in this project. If data were recorded for all students taking these six tests, there would be sufficient achievement data to perform a representative national study.

- Currently, there are at least seven states which do not report supplemental program participation to MSRTS. The lack of this data introduces a clear bias into any analysis performed. According to MSRTS personnel, the requirements for reporting participation data to ED has led to dramatically improved recording since the dates covered by the abstract used for this project. The more complete this information, the more usable it is for analytical purposes, particularly multiple regression models.

Recommendations

Based on these factors and discussions with MSRTS, SEA, LEA and Technical Assistance Center personnel, the following recommendations for improving the MSRTS database for the purposes of national state and local level reporting and research are submitted.

1. It is essential to promote the concept that educating currently migrant children is cooperative. Because a student may be educated in more than one district, or in the case of interstate children, more than one state, the *responsibility and accountability for that educational experience transcends the individual LEA*. No single LEA or state can, or should, take credit or blame. An evaluation of the academic achievement outcome from participating in a single, individualized, five week, summer school MEP project is essentially meaningless. Evaluation of the outcomes and academic achievement in the educational system of the national MEP, regardless of geographic moves, is critical to understanding the value of the MEP. The only way to obtain sufficient national data on the educational experience of all MEP students is through the *full use of MSRTS*. Only in this way can MSRTS be used for a nationally representative study. In addition, full use of MSRTS would make it a meaningful planning and evaluation tool for local and state program administrators for conducting evaluations and large scale needs assessments. Therefore, full use should be highly encouraged.

2. A system of incentives must be established to encourage the entry of achievement data into the system. One possible incentive to both SEAs and LEAs would be that if a pre-established proportion of data were recorded, MSRTS would perform the required analyses and generate the required reports to fulfill state and local evaluation and reporting requirements.

3. Although the quality of the data entered in MSRTS is high, it could be improved by developing interactive programs which would allow only valid entries to be entered into the system.

4. The MSRTS goal of on-line data entry at the LEA or Project level, via personal computers, is not only admirable, but essential to improving the data collection system. All discussions regarding the subject of data entry suggest that the current system of data entry by clerks at centralized locations leads to inordinate delays in the system, and these delays, in turn, discourage full use of MSRTS. Interactive on-line entry and retrieval will greatly improve the timeliness of information exchange, increase perceived value of the system for teachers and MEP administrators, and result in a higher level of participation.

5. Coordination of MSRTS with states which maintain separate achievement databases would enhance the representativeness of the data in the system. Use of MSRTS identifiers in the state database would permit these state data to be added to MSRTS with simple uploading programs.

6. Establishment of a universal testing date, e.g., the first Monday in May, for all MEP students, regardless of geographic location on that date, would ensure that: (a) all students would be tested each year, (b) students would not need to be tested every time they move, and (c) testing cycles for evaluation purposes would be standardized across the country.

7. Given that six tests accounted for almost two thirds of the tests recorded in MSRTS, greater use any of the six tests analyzed in this study would assist in (a) establishing a database with more universal and usable achievement data for teachers, and (b) broadening the base for analytical purposes. Although ED cannot recommend that specific tests be used, it could notify MEP projects of what the current situation is and imply that certain analyses would not be possible unless there was more uniformity in test selection.

IV. RESULTS

A. Enrollment of Migrant Students

The goal "to properly identify and enroll all eligible migrant children" can only be truly assessed in terms of identifying the universe of all migrant children, and to determine the proportion of that universe that is (1) identified and enrolled in MEP, and (2) served under the auspices of MEP.

Comparisons of the 1985-86 academic year in this study with the data for 1977 (RTI, 1981) showed an increase in the Migrant population identified and enrolled in MEP. The total number of enrolled students increased 20 percent, from 371,800 in 1977 to 446,144 in 1986 (including approximately 118,000 archived students). Without identification of the universe of migrant children, however, there was no way of knowing if this increase resulted from improved recruitment efforts, less stringent identification criteria or from a general increase in the migrant population during that nine year period.

Because the MSRTS database contains records only of *enrolled* eligible children, it could not be used to identify the universe of all migrant children. Nevertheless, statements can be made about the relative effectiveness of identification and enrollment activities, particularly as they effect enrollment of currently migrant children, by examining:

- the relative proportion of current to formerly migrant children enrolled in each stream, and
- the number of enrollments per pupil.

The results of ASI's analysis of the MSRTS enrollment data suggested the following:

- The majority (51 percent) of currently migrant students were not enrolled in more than one MEP project school over a period of two years.
- Recruitment and enrollment efforts of currently migrant students in the Eastern Stream states were somewhat less successful than in the Western and Midwestern Stream states.

Discussion:

There were 806,249 enrollments in the period surveyed (see Table 1) representing 357,745 students (see Table 2). Twenty five percent of all migrant students were in the Eastern Stream.

The Midwestern Stream accounted for 30 percent and the Western Stream accounted for 45 percent of the total number of students. Fifty-four percent of all enrolled students were formerly migrant.

TABLE 1

NUMBER OF ENROLLMENTS BY MIGRANT STREAM AND STATUS
SEPT 1984-JUNE 1986

MIGRANT STATUS	EAST N	EAST %	MIDWEST N	MIDWEST %	WEST N	WEST %	TOTAL N	TOTAL %
CURRENTLY MIGRATORY	93,797	11%	140,789	17%	174,299	21%	401,706	50%
FORMERLY MIGRATORY	105,204	13%	114,611	12%	209,279	26%	404,543	50%
TOTAL	199,001	24%	255,400	29%	383,578	47%	806,249	100%

note: Percentages are based on the total number of enrollments.

FIGURE 2

MIGRANT STUDENTS BY STREAM AND STATUS: SEPTEMBER 1984 - JUNE 1986

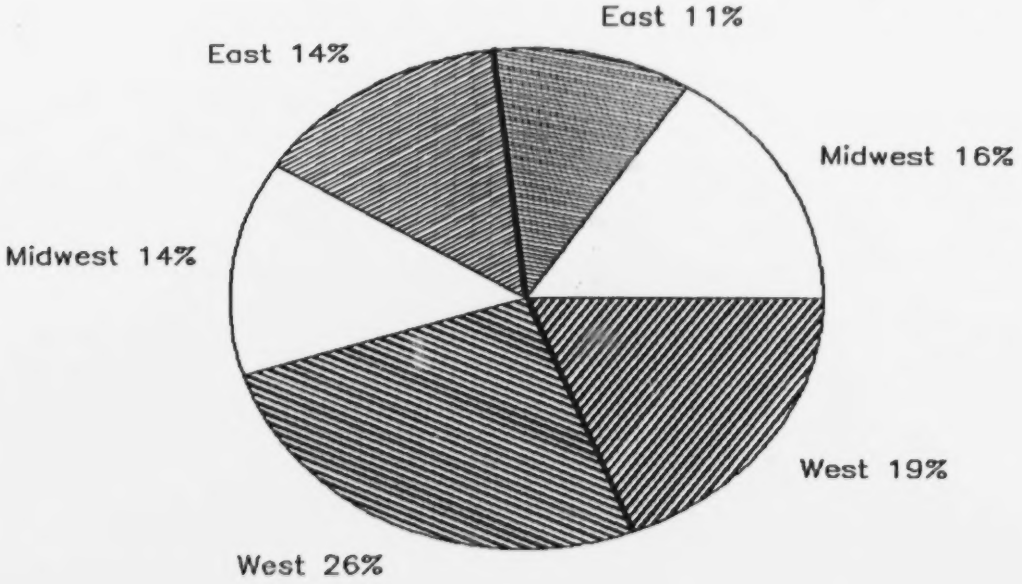

TABLE 2

NUMBER OF STUDENTS BY MIGRANT STREAM AND STATUS
SEPT 1984-JUNE 1986

MIGRANT STATUS	EAST N	EAST %	MIDWEST N	MIDWEST %	WEST N	WEST %	TOTAL N	TOTAL %
CURRENTLY MIGRATORY	39,767	11%	54,990	16%	69,242	19%	165,856	46%
FORMERLY MIGRATORY	50,587	14%	69,591	14%	93,042	26%	191,672	54%
TOTAL	90,354	25%	124,581	30%	162,284	45%	357,528	100%

note: Percentages are based on the total number of students.

Currently migrant students, being more likely to move than formerly migrant students, were expected to have had a higher proportion of multiple enrollments. Generally it was expected that currently migrant students would have had at least two MEP enrollments per academic year. The number of enrollments for currently migrant students was, however, considerably lower than expected. For the two academic years and the intervening summer in this analysis, there were an average of 2.42 enrollments per currently migrant student and 2.11 enrollments per formerly migrant student.

A slightly larger proportion of formerly migrant students had only one or two enrollments over a two-year period (formerly migrant, 81 percent; currently migrant, 78 percent). The majority of currently migrant students (51 percent) had only one enrollment; 27 percent had only two (see Table 3). It appears that *not only were currently migrant students not being enrolled in receiving districts, they were also not being re-enrolled in their home districts.* This was particularly true among currently migrant students in the Eastern Stream where only 18 percent had more than two enrollments in the two year period.

The number of students were heavily skewed toward the lower grades, partly as a result of the archiving of the records of inactive students. Grade school students (grades 1-6) accounted for 57 percent of the enrollments; only 7 percent were high school students (grades 10-12). The remainder of the enrollments were for grades 7-9, pre-school or ungraded.

B. Supplemental Program Services

Two of the stated goals of the MEP are to:

1. Design specific curricular programs in academic discipline based upon migrant childrens' assessed needs.

2. Provide academic programs, counseling activities, career options and vocational training that encourage migrant children's retention in school and contribute to success in later life.

To achieve these goals, the MEP provides a number of educational and educational support services to participants. The educational programs include: English for Speakers of Other Languages (ESOL), Bilingual Education, Supplemental Reading, Supplemental Mathematics, Tutorial Reading, Tutorial Mathematics, Tutorial Secondary Education, Vocational Education, Career Education, Language Arts, Gifted Student Programs, Work Study Programs, GED and High School Equivalency Programs (HEP), and Preschool programs. Educational support programs include pupil services, transportation services, nutritional services and handicapped services.

TABLE 3

NUMBER OF ENROLLMENTS PER MIGRANT STUDENT
(JUNE 1984-SEPT 1986)

MIGRANT STATUS: CURRENT

	NUMBER OF ENROLLMENTS											
	ONE		TWO		THREE		FOUR		FIVE +		TOTAL	
STREAM	N	%	N	%	N	%	N	%	N	%	N	%*
EAST	28,219	57%	12,601	25%	4,496	9%	2,123	4%	2,219	4%	49,658	100%
MIDWEST	34,037	48%	20,289	28%	7,651	11%	4,718	7%	4,979	7%	71,674	100%
WEST	47,967	51%	24,968	27%	12,238	13%	4,520	5%	3,888	4%	93,581	100%
TOTAL	110,223	51%	57,858	27%	24,385	11%	11,361	5%	11,086	5%	214,913	100%

MIGRANT STATUS: FORMER

	NUMBER OF ENROLLMENTS											
	ONE		TWO		THREE		FOUR		FIVE +		TOTAL	
STREAM	N	%	N	%	N	%	N	%	N	%	N	%*
EAST	19,725	36%	25,772	46%	6,956	13%	2,310	4%	741	1%	55,504	100%
MIDWEST	32,674	41%	39,537	50%	6,396	8%	1,070	5%	125	**	79,802	100%
WEST	40,797	37%	39,977	37%	24,189	22%	3,465	3%	445	**	108,873	100%
TOTAL	93,196	38%	105,286	43%	37,541	15%	6,845	3%	1,311	**	244,179	100%

* Due to rounding percents may not equal 100%.
** Less than 1 percent.

One of the measures of success of MEP is the extent to which migrant children were receiving supplemental educational and educational support services. Results of our analysis of the MSRTS data suggested the following:

- Nationally, currently migrant children were about as likely as formerly migrant children to have received supplemental program services, but in the Eastern and Midwestern Streams larger proportions of currently migrant children were served.

- A substantially greater proportion of enrolled migrant children received supplemental services in the Western Stream than in either the Eastern or Midwestern Streams.

- In 1985-86, the first year for which supplemental service funding data were available, less than half of all enrolled eligible children were served with MEP funded services. In the Midwest Stream, about one quarter were served compared to over half of the children enrolled in the Western Stream.

Discussion:

In the two academic years and the intervening summer analyzed, a total 801,926 supplemental services (see Table 4) were provided to 222,959 MEP students (see Table 5). The greatest proportion of services were in reading and mathematics. Reading programs (including supplemental reading and tutorial reading) accounted for 27 percent; 19 percent were supplemental mathematics and mathematics tutorial programs; 16 percent were bilingual and E.S.O.L programs; 11 percent were other types of educational programs; and 27 percent were pupil support services.

Supplemental program services were provided to 222,959 students from September 1, 1984 to June 15, 1986 (see Table 5); 62 percent of all enrolled students. Nationally, formerly migrant students were as likely to receive supplemental services as currently migrant students: 64 percent of currently migrant and 61 percent of formerly migrant students received some form of supplemental service. There were, however, marked differences in the proportions of enrolled students served by stream.

In the Western Stream, a substantially larger proportion of enrolled students were served (77 percent formerly, 72 percent currently migrant students) than in the Eastern (54 percent formerly, 61 percent currently migrant students) and Midwestern Streams (25 percent formerly, 60 percent currently).

Overall, children enrolled in MEP had an average of 2.2 services per child for the 2-year period analyzed. Excluding those children who received no services, the average was 3.6 services per child.

TABLE 4

NUMBER OF SERVICES PROVIDED
BY MIGRANT STREAM AND STATUS

	EAST				MIDWEST				WEST				TOTAL	
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER			
SERVICE	N	%	N	%	N	%	N	%	N	%	N	%	N	%
MATH	16,191	9%	23,013	13%	20,135	14%	9,105	6%	39,069	8%	49,364	10%	155,867	19%
READING	27,276	16%	32,688	19%	30,297	21%	13,741	10%	46,914	10%	61,853	13%	212,769	27%
LANGUAGE	6,036	3%	4,235	2%	11,515	8%	3,942	3%	45,432	9%	54,037	11%	125,197	16%
OTHER ED. PROGRAMS	11,620	7%	17,370	10%	9,885	7%	3,511	2%	20,367	4%	26,883	6%	89,636	11%
SUPPORT SERVICES	10,664	6%	26,640	15%	28,778	20%	11,999	8%	57,113	12%	83,363	17%	218,457	27%
TOTAL	70,887	9%	103,946	13%	100,610	13%	42,298	5%	208,885	26%	275,300	34%	801,926	100%

note: Except for totals, percentages are based on the number of services provided in a particular stream.

FIGURE 3

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES AND MIGRANT FUNDED SUPPLEMENTAL SERVICES, BY MIGRANT STREAM AND STATUS: SEPTEMBER 1985 - JUNE 1986

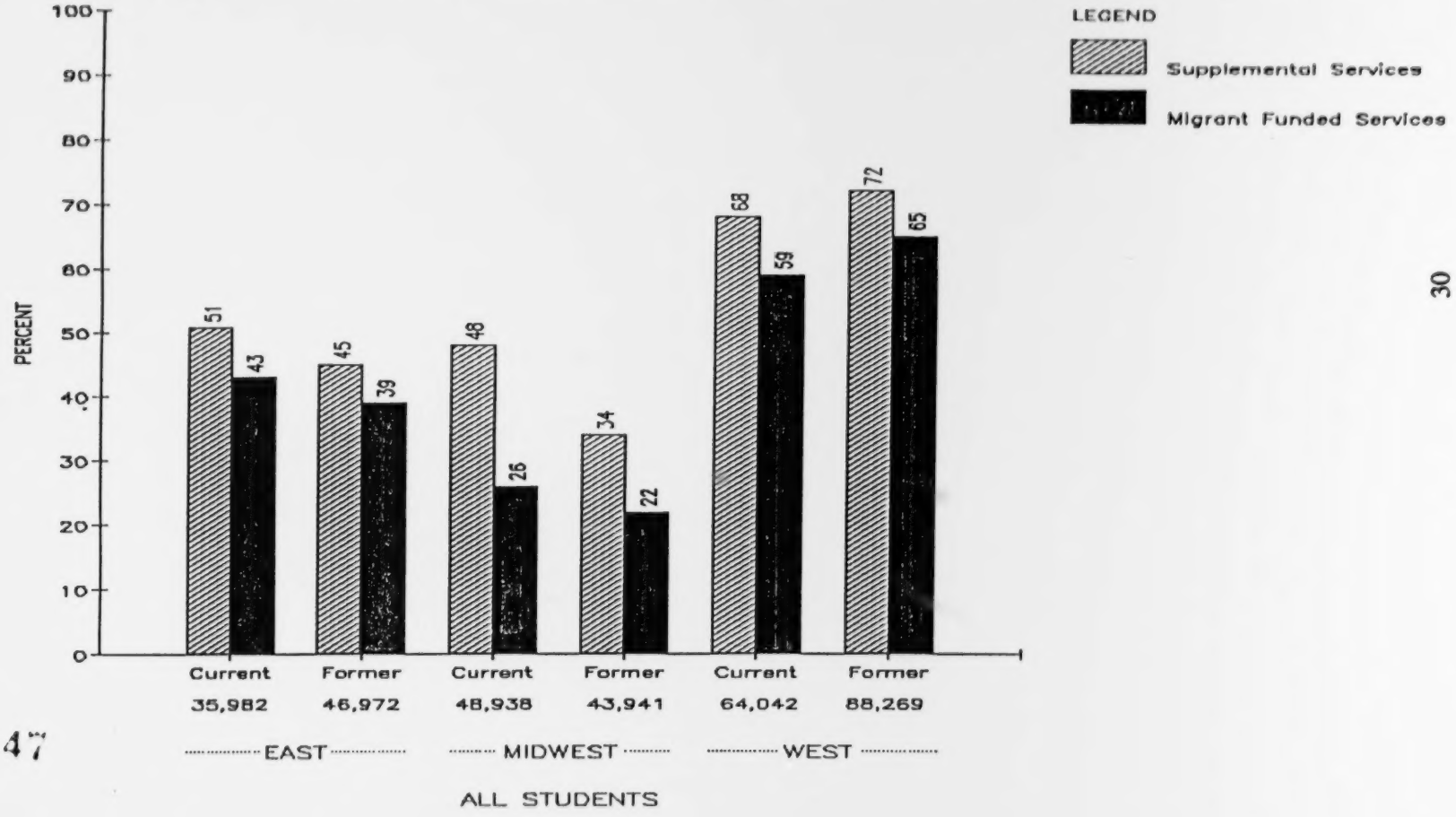

TABLE 5

NUMBER AND PERCENT OF ENROLLED STUDENTS RECEIVING SUPPLEMENTAL SERVICES AND MEP FUNDED SUPPLEMENTAL SERVICES BY MIGRANT STREAM AND STATUS: 1984-1986 and 1985-1986

(SEPT. 1984 - JUNE 1986)

	EAST		MIDWEST		WEST		TOTAL		GRAND TOTAL
	CURRENT	FORMER	CURRENT	FORMER	CURRENT	FORMER	CURRENT	FORMER	
ENROLL	39,767	50,587	54,990	69,591	69,242	93,042	165,856	191,672	357,528
SERVED									
(N)	24,154	27,368	32,726	17,621	49,600	71,490	106,480	116,479	222,959
(%)	61%	54%	60%	25%	72%	77%	64%	61%	62%

(AUG. 1985 - JUNE 1986)

ENROLL	35,982	46,972	48,938	43,941	64,042	88,269	148,962	179,182	328,144
SERVED									
(N)	18,469	21,276	23,276	15,025	43,255	63,533	85,000	99,834	184,834
(%)	51%	45%	48%	34%	68%	72%	57%	56%	56%
MEP$									
(N)	15,489	18,390	12,665	9,466	37,894	57,140	66,048	84,996	151,044
(%)	43%	39%	26%	22%	59%	65%	44%	47%	46%

Migrant Education Program Funded Services

An issue of concern is what proportion of migrant children were served under MEP funded projects and what proportion received services funded through other sources. On August 1, 1985 MSRTS added a new field to the student record which indicated whether the supplemental program was "...paid for partially or totally by Migrant Education funds". This addition enabled us to address this issue.[2]

A small proportion of enrolled migrant children were receiving supplementary services funded through sources other than MEP. Fifty-six percent of all enrolled migrant children received some form of supplemental services in the 1985-86 school year; 46 percent received services funded in part or in full under MEP.

In 1985-86, the proportion of children receiving any services ranged widely across streams, from a low of 34 percent of formerly migrant children in the Midwestern Stream to a high of 72 percent of formerly migrant children in the Western Stream (see Table 5). Similarly large differences were found for the proportion of children receiving MEP funded services, ranging from a low of 22 percent of formerly migrant children in the Midwestern Stream to a high of 65 percent of the formerly migrant children in the Western Stream. A slightly higher proportion of currently migrant students (57 percent) than formerly migrant students (56 percent) were served. But MEP funded services were more likely to have been provided to formerly migrant children (47 percent) than to currently migrant students (44 percent).

Over 431 thousand services were provided in 1985-86 to 184,834 (56 percent) of the 328,144 students enrolled. This amounted to an average of 2.3 services per served child (over 143,000 children had no supplementary services recorded in that year). Of the services provided, 340,500 were MEP funded, or about 1.84 per served child.

Generally, the proportion of middle school and high school students receiving supplemental services was lower than the proportion of grade school students; there were substantial differences in the proportions served across the streams.

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2 Supplemental programs that began prior to the 1985-86 school year did not have this information. Since data covering the entire survey period would present a somewhat misleading picture of the percentage of supplemental services provided under the auspices of MEP funds, we calculated the proportion of children served with MEP funded services only for those enrolled in the 1985-86 school year.

C. Migrant Student Achievement

Although measurable academic achievement was not an explicitly stated goal of MEP, it is, nevertheless, an important measure of the success of the program. Additionally, the stated purpose of this project was:

> To assess state and local databases and MSRTS to determine the feasibility of using data from these sources for a national study of *achievement* of Migrant Education Program participants.[3]

It was, therefore, necessary to determine the following:

- o presence of test data in the MSRTS records,
- o the quality of that data,
- o the association of test data and supplemental service data, and
- o the national representativeness of the sample of students with usable test data.

The analysis of MSRTS test data indicated the following:

- o 151,222 students (42 percent of enrolled students) had achievement test scores reported,
- o 28,567 students (8 percent of enrolled students) had 2 or more complete reading tests,
- o 27,530 students (7.7 percent of enrolled students) had 2 or more complete mathematics tests,
- o 18,987 students (5.3 percent of enrolled students) had 2 or more complete reading tests and at least one supplemental program, and
- o 14,633 students (4.1 percent of enrolled students) had 2 or more complete mathematics tests and at least one supplemental mathematics program.

From the analysis of test data by stream, grade and status, it was concluded that the MSRTS data were not nationally representative of the population of MEP participants, and could not be used for a valid and reliable national study of MEP student achievement.

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[3] Analysis of test scores was beyond the scope of this project.

Discussion:

The MSRTS abstract of education records contained 530,644 achievement test records for 151,222 currently active migrant students, 42% of the enrolled students. Each record contained information about an achievement test taken during an enrollment in the period covered by this report. There may have been one, several, or no test records in the test data file associated with each enrollment in the student history file.

Each test record contained information concerning the student, the achievement test taken and the student's test score. Five fields were critical for proper interpretation of the test record: the test code, the test score type, the test form, the test level and the test score. The description of the data and criteria for inclusion appear in the Technical Appendix of this report.

Preliminary analysis revealed that of the 852 different achievement tests recorded in MSRTS, very few were recorded at a frequency great enough to warrant inclusion in a national study. The amount of time allotted for this study made it impossible to determine the completeness and validity for each test. The analysis was therefore limited to those tests that made up at least one percent of the total number of test records. The reading and math versions of five standardized achievement tests occurred frequently enough in the sample to warrant further analysis (see Table T-1). Ten tests were recorded at a frequency greater than 1% of the total number of test records. These ten tests comprised our sample. They were the math and reading versions of five well known tests: CTBS, SAT, CAT, WRAT, ITBS. Together these tests comprised 60% of all the test records contained in MSRTS. The language versions of CTBS and CAT accounted for another 15% of the total number of tests, but were not included because of time constraints and the special nature of the subject matter covered by these two tests. Detailed discussion of the test forms, proportion of all tests, test score types, and data validity checks appear in the Technical Appendix. Tables of the frequency distributions of these test by grade and by the migrant status of the students who had taken these achievement tests are presented in Appendix B and Appendix C.

Forty two percent of the students (151,222 students) had achievement test data recorded on MSRTS (see Table 6). Half (50 percent) of these students were formerly migratory, and nearly all (98 percent) were the children of agricultural workers. Students with test records were in approximately the same proportion of grade distribution as enrollment: 68% were grade school students and 5 percent were high school students; the remainder were intermediate school students or were ungraded.

Once the number of complete test records was identified, a determination of the number of students with test records that could be used in a pretest-posttest analysis was undertaken. Test records were considered usable if the information in all five fields was valid and if there were two test records of a specific test code for a student.

TABLE 6

STUDENTS WITH ACHIEVEMENT TEST RECORDS
BY GRADE, MIGRANT STREAM AND STATUS

GRADE	EAST				MIDWEST				WEST			
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER	
	N	%	N	%	N	%	N	%	N	%	N	%
PO	3	1%	3	23%	1	(*)	0	0%	3	1%	5	45%
P1	4	1%	2	3%	3	1%	2	13%	2	(*)	4	3%
P2	0	0%	0	0%	3	1%	0	0%	0	0%	1	(*)
P3	2	(*)	1	(*)	2	(*)	1	1%	0	0%	2	(*)
P4	30	2%	7	1%	31	2%	16	2%	17	1%	20	2%
P5	23	8%	16	5%	243	34%	23	5%	8	1%	22	7%
K	832	22%	546	15%	945	23%	589	17%	2,429	33%	3,107	39%
01	2,169	51%	1,446	30%	2,391	48%	1,147	26%	3,385	49%	5,359	58%
02	2,104	62%	1,843	39%	2,187	48%	1,293	29%	3,248	53%	5,588	63%
03	1,949	61%	1,783	36%	3,811	85%	1,633	35%	3,142	52%	5,467	61%
04	1,831	58%	1,721	39%	1,975	44%	1,254	29%	3,188	54%	5,591	64%
05	1,760	60%	1,721	38%	4,097	89%	1,486	35%	3,073	55%	5,284	64%
06	1,634	57%	1,612	38%	1,999	43%	1,040	26%	3,011	59%	4,737	62%
07	1,672	60%	1,533	38%	4,041	85%	1,320	34%	2,601	54%	4,564	64%
08	1,042	45%	1,226	34%	1,720	39%	686	19%	1,930	48%	3,428	52%
09	628	34%	695	23%	3,490	76%	754	22%	1,255	29%	2,346	40%
10	210	20%	426	18%	879	29%	297	12%	900	29%	1,927	37%
11	97	15%	223	14%	1,669	77%	393	20%	575	26%	1,245	31%
12	19	7%	60	8%	164	15%	32	3%	62	8%	145	12%
UG	182	11%	312	18%	137	8%	35	3%	47	7%	105	21%
TOTAL	16,191	41%	15,176	30%	29791	51%	12,001	25%	28,876	42%	48,947	53%

note: Percentages are based on the total number of students in that category.
Percentages less than .5 are denoted by (*).

A student who had one complete test was considered as not having a usable test record. These individuals could, however, be included in a "point-in-time," or cross-sectional, assessment. If a point-in-time assessment were to be performed the number of students who could be included would increase dramatically over those who could be used in a pretest - posttest analysis. A point-in-time assessment would include 86,072 (24 percent) students in reading and 83,948 (23 percent) in mathematics.

Students with at least two complete test records of the same test were included in the group of students with usable records; 236,139 test *records* were considered sufficiently complete for research purposes.[4] The five reading and the five math test files were merged to obtain an unduplicated count of the number of *students* with usable test records:

- o 30,250 students had at least two test records (either in reading or math) that could be used in a pretest-posttest analysis.
- o 28,567 students had two or more usable reading tests records (see Table 7).
- o 27,530 students had two or more usable math tests (see Table 8).

Most students had usable test data in both the reading and math files; there were, however, some students who were represented in only one file or the other.

In order to assess the effects of providing educational supplemental services in a pretest - posttest design, the test records of the students had to be connected with the supplemental services provided to that student. It would not make sense to evaluate the effect of providing reading tutorial services with data on a mathematics test. Similarly, measuring achievement of a student who had not received MEP supplemental services would not yield information regarding the effect of participation in the MEP program. This final stage of the analysis yielded the following results:

- o 18,987 students (5.3 percent) had two reading tests and a supplemental reading program (see Table 9),
- o 14,633 (4.1 percent) students have two math tests and a supplemental math program (see Table 10).

A pretest-posttest model requires that the treatment be administered between the pretest and the posttest. The interval between the pretest and posttests must also be equivalent for all students in the study. A spring test - treatment- spring test cycle or a fall test - treatment- spring test cycle would both be valid approaches, but should be treated as separate analyses. Time constraints did not allow for determination of testing cycles in relation to supplemental service delivery cycles in the MSRTS database extracts.

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[4] Please note that this was the number of complete test records, not the number of students with complete test records.

TABLE 7

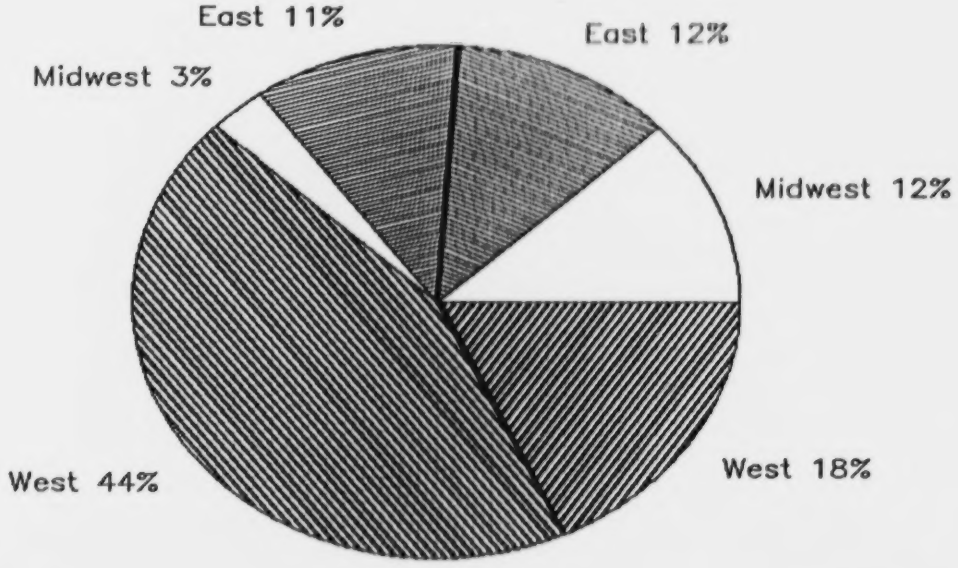
STUDENTS WITH TWO OR MORE COMPLETE TEST RECORDS
BY GRADE, MIGRANT STREAM AND STATUS
(READING)

GRADE	EAST				MIDWEST				WEST			
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER	
	N	%	N	%	N	%	N	%	N	%	N	%
PO	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P5	0	0%	0	0%	5	1%	0	0%	0	0%	0	0%
K	43	1%	30	1%	5	(*)	5	(*)	29	(*)	60	1%
01	187	4%	187	4%	137	3%	74	2%	284	4%	709	8%
02	420	12%	393	8%	240	5%	119	3%	516	8%	1,441	16%
03	527	16%	468	10%	409	9%	132	3%	602	10%	1,546	17%
04	531	17%	446	10%	407	9%	124	3%	658	11%	1,811	21%
05	518	18%	473	11%	402	9%	117	3%	763	14%	1,792	22%
06	486	17%	429	10%	350	7%	86	2%	784	15%	1,584	21%
07	365	13%	333	8%	354	8%	74	2%	592	12%	1,441	20%
08	145	6%	224	6%	374	8%	43	1%	467	12%	1,020	15%
09	58	3%	128	4%	300	7%	28	1%	174	4%	380	6%
10	31	3%	78	3%	198	7%	11	(*)	160	5%	462	9%
11	14	2%	34	2%	138	6%	14	1%	140	6%	342	8%
12	0	0%	5	1%	43	4%	1	(*)	6	1%	34	3%
UG	1	(*)	7	(*)	7	(*)	2	(*)	2	(*)	6	1%
TOTAL	3,326	8%	3,235	6%	3,369	6%	830	2%	5,177	8%	12,628	14%

note: Percentages are based on the total number of students in that category.
Percentages less than .5 are denoted by (*).

FIGURE 4

DISTRIBUTION OF STUDENTS WITH TWO OR MORE COMPLETE *READING* TEST RECORDS, BY MIGRANT STREAM AND STATUS



FORMERLY MIGRANT
58%
(11,872)

CURRENTLY MIGRANT
42%
(16,693)

TABLE 8

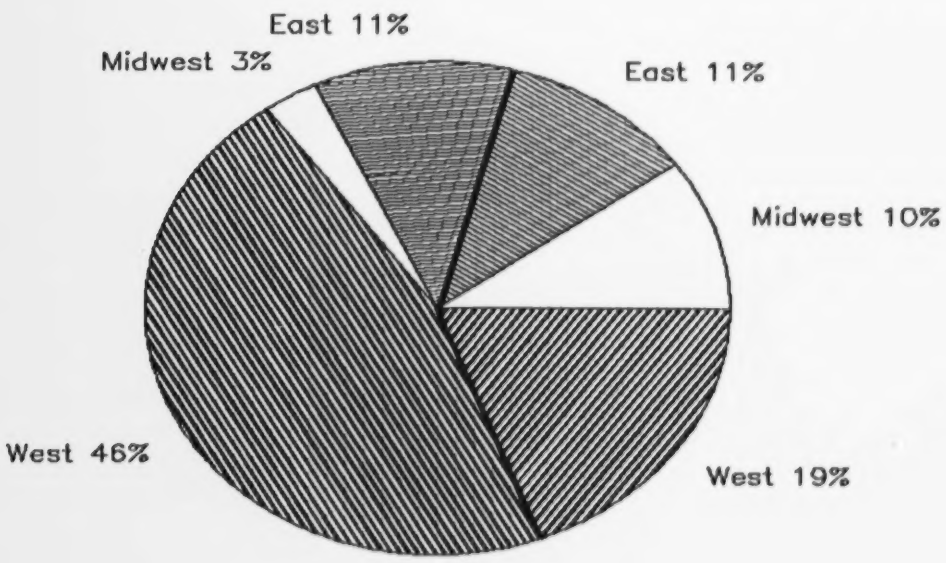
STUDENTS WITH TWO OR MORE COMPLETE TEST RECORDS
BY GRADE, MIGRANT STREAM AND STATUS
(MATH)

GRADE	EAST				MIDWEST				WEST			
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER	
	N	%	N	%	N	%	N	%	N	%	N	%
PO	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P1	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P3	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
P5	0	0%	0	0%	6	1%	0	0%	0	0%	0	0%
K	13	(*)	17	(*)	4	(*)	3	(*)	26	(*)	57	1%
01	129	3%	164	4%	113	2%	70	2%	281	4%	742	8%
02	362	11%	366	8%	202	4%	120	3%	511	8%	1,499	17%
03	465	15%	461	9%	382	9%	148	3%	605	10%	1,571	18%
04	475	15%	415	9%	340	8%	131	3%	679	12%	1,824	21%
05	477	16%	447	10%	318	7%	101	2%	768	14%	1,779	21%
06	453	16%	397	9%	317	7%	74	2%	788	15%	1,587	21%
07	332	12%	293	7%	315	7%	63	2%	590	12%	1,430	20%
08	128	6%	193	5%	338	8%	36	1%	451	11%	998	15%
09	55	3%	110	4%	280	6%	30	1%	157	4%	373	6%
10	29	3%	62	3%	195	7%	16	1%	155	5%	454	9%
11	15	2%	30	2%	135	6%	15	1%	130	6%	320	8%
12	0	0%	2	(*)	41	4%	1	(*)	8	1%	36	3%
UG	0	0%	7	(*)	10	1%	4	(*)	0	0%	5	1%
TOTAL	2,933	7%	2,964	6%	2,996	5%	812	2%	5,149	8%	12,675	14%

note: Percentages are based on the total number of students in that category.
Percentages less than .5 are denoted by (*).

FIGURE 5

DISTRIBUTION OF STUDENTS WITH TWO OR MORE COMPLETE *MATH* RECORDS, BY MIGRANT STREAM AND STATUS



FORMERLY MIGRANT

60%
(16,451)

CURRENTLY MIGRANT

40%
(11,078)

TABLE 9

STUDENTS WITH TWO USABLE READING ACHIEVEMENT TESTS AND
A READING SUPPLEMENTAL PROGRAM
BY GRADE, MIGRANT STREAM AND STATUS

GRADE	EAST				MIDWEST				WEST			
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER	
	N	%	N	%	N	%	N	%	N	%	N	%
K	41	1%	27	1%	2	0%	2	0%	20	0%	39	0%
01	165	4%	151	3%	75	1%	57	1%	205	3%	521	6%
02	332	10%	256	5%	177	4%	87	2%	396	6%	1,090	12%
03	385	12%	325	7%	248	6%	84	2%	451	7%	1,148	13%
04	415	13%	319	7%	260	6%	93	2%	511	9%	1,386	16%
05	381	13%	341	8%	233	5%	85	2%	596	11%	1,350	16%
06	366	13%	308	7%	189	4%	62	2%	577	11%	1,090	14%
07	241	9%	181	5%	180	4%	43	1%	384	8%	893	12%
08	86	4%	117	3%	208	5%	28	1%	295	7%	550	8%
09	28	2%	79	3%	163	4%	11	(*)	70	2%	121	2%
10	7	1%	38	2%	64	2%	0	0%	47	1%	100	2%
11	2	(*)	12	1%	43	2%	1	(*)	44	2%	78	2%
12	0	0%	4	1%	9	1%	0	0%	2	(*)	5	(*)
UG	1	(*)	4	(*)	0	0%	2	(*)	0	0%	0	0%
TOTAL	2,450	6%	2,162	4%	1,851	3%	555	1%	3,598	5%	8,371	9%

note: Percentages less than .5 are denoted by (*). Percentages are based on the total number of students in that category.

TABLE 10

STUDENTS WITH TWO USABLE MATH ACHIEVEMENT TESTS AND
A MATH SUPPLEMENTAL PROGRAM
BY GRADE, MIGRANT STREAM AND STATUS

GRADE	EAST				MIDWEST				WEST			
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER	
	N	%	N	%	N	%	N	%	N	%	N	%
K	10	(*)	6	(*)	0	0%	1	(*)	14	(*)	31	(*)
01	74	2%	107	2%	35	1%	17	(*)	189	3%	481	5%
02	170	5%	160	3%	86	2%	31	1%	333	5%	853	10%
03	231	7%	260	5%	159	4%	51	1%	408	7%	1,012	11%
04	234	7%	184	4%	158	4%	59	1%	473	8%	1,131	13%
05	225	8%	235	5%	98	2%	38	1%	540	10%	1,174	14%
06	231	8%	208	5%	117	2%	31	1%	540	11%	994	13%
07	179	6%	140	3%	103	2%	33	1%	341	7%	753	11%
08	69	3%	94	3%	127	3%	21	1%	284	7%	487	7%
09	23	1%	45	1%	52	1%	9	(*)	55	1%	106	2%
10	2	(*)	23	1%	26	1%	5	(*)	47	1%	96	2%
11	3	(*)	6	(*)	10	(*)	4	(*)	33	2%	48	1%
12	0	0%	0	0%	1	(*)	0	0%	1	(*)	5	(*)
UG	0	0%	4	(*)	3	(*)	4	(*)	0	0%	0	0%
TOTAL	1,451	4%	1,472	3%	975	2%	304	1%	3,258	5%	7,172	8%

note: Percentages less than .5 are denoted by (*). Percentages are based on the total number of students in that category.

Representativeness

The question of primary interest was whether the students who had usable achievement test data were a representative sample of the migrant student population contained in MSRTS. Comparisons of the group of students with usable test data with all students with enrollment information in MSRTS showed that *the test sample was not a representative sample of the migrant student population and was biased in numerous ways, some of which were unknowable.*

Chi-square tests of three independent variables (migrant stream, migrant status and student's grade) were performed to determine whether the test sample deviated significantly from the entire student population contained in the MSRTS database. All three chi square tests yielded significant results. With a data base this large, however, even small differences would produce statistically significant results. The size of the differences of the cell values also had to be taken into account to determine if these results were meaningful as well as significant.

The differences in proportions of cases within the cells of two of the independent variables, student grade and migrant status, while significant, did not appear meaningful. The migrant status and grade distribution of the tested group did not differ greatly from the proportions in the population of enrolled students. This, however, was not true of the distribution by stream of students with test data as compared to the distribution by stream of all enrolled students. In this case, the differences were meaningfully large, as well as statistically significant.

Local and state requirements appear to have introduced a geographic bias into the data in at least three ways:

- Eleven states did not use (or did not report) any of the achievement tests that comprised our sample. An additional five states had no complete test records.

- Districts and state departments of Education often require that specific tests be administered within their jurisdictions. This requirement has operated to dramatically reduce the number of students with two usable test records.

- Recording problems with some tests led to their under representation in the sample and probably favored schools, school districts or states that use certain achievement tests. For example, the nature of the SAT and the recording requirements of MSRTS reduced the number of complete tests to 39 percent of all tests recorded; the lowest rate of complete tests of any achievement test in the sample. SEAs and LEAs using this test were therefore under represented in the sample. Other SEAs and LEAs may be over represented if they were using a test less prone to improper recording.

Some grades were under represented and additional data should be collected to ensure adequate representation of these grades in a future national study.

In addition, migrant students were often tested by their new teacher while the teacher waited for the child's records to be received from MSRTS. Often the child had been placed in a class before the arrival of the MSRTS records and the records were used as a back-up to the teachers assessment of student achievement. *Some students had as many as nineteen achievement tests* recorded on MSRTS for the period covered by this analysis. For the tests used in this analysis *students may have taken the same test up to five times in a two year period.* Under such circumstances students may have become test wise and test results were of questionable validity.

In conclusion, sufficient data did not exist in the MSRTS system to conduct a national pretest - posttest evaluation of migrant student educational achievement in reading and mathematics. Students with complete and usable test records did not provide a proportionate sample in the three migrant streams and in the migrant status categories to assess relative gains in reading or mathematics.

In addition, MSRTS achievement test data did not have a proper control group for assessing student progress. Supplemental program selection and participation was not randomly assigned. Attempts to use a control group from within MSRTS (such as MEP students with no supplemental services) must be done with care and must take into account any pretest differences among the groups to be studied. Analysis of covariance may seem to be an appropriate analytical technique, but its use depends on random assignment to experimental and control groups. There is no other way to ensure that the differences between control and treatment groups are free of systematic bias (Keppel, 1973).

D. Migrant Student Health

The stated goal of MEP is:

> To provide or access supportive services that foster physical and mental well-being, when necessary, for children's successful participation in the basic instructional programs, including dental, medical, nutritional, and psychological services.

To accomplish this goal, the Office of Migrant Education (OME) and the Office of Migrant Health (OMH), of the U.S. Department of Health and Human Services, entered into a working agreement whereby MEP can access health care for an enrolled student at a reduced cost. According to their agreement, "a key component of the migrant education program and a focal point of this working agreement is the Migrant Student Record Transfer System". Both agencies agreed to coordinate and share health data on migrant children through the coordination of MSRTS.

OME provides comprehensive primary health care to migrant workers and their families in 122 Migrant Health Centers in 35 states and Puerto Rico. Migrant students may also receive health care from a number of other sources.

The MSRTS health record extract was examined to determine (1) the proportion of enrolled students with health records, (2) their usefulness for evaluating the health status of migrant children through analysis of the "unresolved health problems" data, and (3) the completeness of immunization data in the health records. This last step was considered an important issue since most schools in the U.S. will not allow a student to register without documentation of having received certain inoculations.

The health records of migrant students contained within MSRTS were independent of the educational records. Enrolled students may not have health records in the MSRTS system if they received health care from some other agency. This does not mean that these students have not received health care but only that they did not receive health care from an agency that reports to MSRTS.

Some students had health records but no education records within the time period covered by this analysis. There were 842,065 health records within the specified time period, representing 125,815 students. Of these, 119,113 students (33 percent of all enrolled students) also had education data within the active MSRTS database (see Table 11). An additional 6,702 children had health records but no enrollment data for the period covered in this report. Because a health record, like enrollment and test records, was generated at each contact, any individual child may have had more than one health record in the database.

TABLE 11

NUMBER OF STUDENTS WITH HEALTH RECORDS
BY MIGRANT STREAM AND STATUS
SEPT 1984-JUNE 1986

MIGRANT STATUS	EAST N	EAST %	MIDWEST N	MIDWEST %	WEST N	WEST %	TOTAL N	TOTAL %
CURRENTLY MIGRATORY	15,645	13%	29,088	24%	24,535	21%	69,268	58%
FORMERLY MIGRATORY	12,503	10%	12,425	10%	24,917	21%	49,845	42%
TOTAL	28,148	23%	41,513	34%	49,452	42%	119,113	100%

note: Students who do not have education records do not have information available concerning migrant stream or status. There are 6,702 students who have only health records. Percentages are based on the total number of students with health records.

Currently migratory students were more likely than former migrants to have received health care through the Migrant Health Program; 58 percent of the students with health records were currently migratory. Twenty-three percent of the students with health records were from the Eastern Migrant Stream; 30 percent students were from the Midwestern Stream, and 42 percent were from the Western Migrant Stream.

Unresolved Health Problems

Aside from reporting routine health screening and patient histories, the health records provided information concerning continuing acute and chronic health problems of migrant students. These are listed on page one of the health record in the unresolved health problem list and in a more detailed description on page two of the health record. Problems requiring attention are printed on the first page of the education record in a section called "E-H Linkage". This alerts the personnel at the receiving school to any potential health problem that might require immediate attention or interfere with the students educational progress. There was no way to determine the severity or the extent to which the health problems listed in MSRTS interfered with educational participation.

Nine percent of the students with health records had unresolved health problems (see Table 12). Slightly more currently migrant students than formerly migrant students had unresolved problems: 5 percent were current and 4 percent were former migrants.

Unresolved health problems were more likely to be reported from the Western Migrant Stream: 14 percent of the Western Stream, 5 percent of the Eastern Stream, and 6 percent of Midwestern Stream students with health information had unresolved health problems.

The regional differences in the proportions of students reported as having had unresolved health problems may be interpreted in several ways:

- The Migrant Health Program provided more services in the Western Stream,
- The Western stream was more likely to report health problems to MSRTS, or
- There were more children with health problems in the Western Stream.

A valid interpretation, however, cannot be determined with the existing data.

TABLE 12

NUMBER OF STUDENTS WITH UNRESOLVED HEALTH PROBLEMS
BY MIGRANT STREAM AND STATUS
SEPT 1984-JUNE 1986

MIGRANT STATUS	EAST N	EAST %*	MIDWEST N	MIDWEST %*	WEST N	WEST %*	TOTAL N	TOTAL %**
CURRENTLY MIGRATORY	710	2%	1,670	4%	3,416	7%	5,796	5%
FORMERLY MIGRATORY	774	3%	962	2%	3,323	7%	5,059	4%
TOTAL	1,484	5%	2,632	6%	6,739	14%	10,855	9%

* Percent of migrant stream.

** Percent of total health records.

Immunization Data

The Migrant Health Program provides prophylactic immunizations to migrant children against a number of diseases. The most common immunizations were for the following: Polio; Diphtheria, Pertussis and Tetanus (DPT); Measles (Rubella); Rubella; Mumps; and Combined Measles, Mumps and Rubella (MMR). In addition, the Western Stream commonly inoculated migrant children with a combined serum against Polio, Diphtheria, Pertussis and Tetanus (see Table 13).

One of the uses of the MSRTS field for unresolved health problems was to note, among other things, a required immunization. Ideally, for each student the record would show all immunizations received in the immunization field and all immunizations required in the unresolved health problems field. Attempts to match the data in these two fields were unsuccessful because we were not able to disentangle data on other types of unresolved health problems from data on required immunizations.

Each state has its own requirements for immunizations needed before a student can be admitted to the school. We did not have a list of required immunizations by state. It was, therefore, not possible to determine if the immunization record was adequate for informing the school of the student's required immunization status and eligibility for admittance.

Because migrant children can receive immunizations from multiple sources, in addition to MEP Health, and these are not necessarily recorded in MSRTS, there is no way to determine the proportion of children with inadequate immunization.

TABLE 13

NUMBER OF IMMUNIZATIONS BY TYPE OF IMMUNMIZATION,
BY MIGRANT STREAM AND STATUS

	EAST				MIDWEST				WEST				TOTAL	
	CURRENT		FORMER		CURRENT		FORMER		CURRENT		FORMER			
	N	%**	N	%**	N	%**	N	%**	N	%**	N	%**	N	%***
TYPHOID/ PARATYPHOID	77	(*)	78	(*)	73	(*)	29	(*)	97	(*)	48	(*)	402	(*)
TUBERCULOSIS	456	(*)	517	(*)	801	(*)	370	(*)	548	(*)	348	(*)	3,040	(*)
TETANUS	233	(*)	389	(*)	212	(*)	70	(*)	119	(*)	128	(*)	1,151	(*)
POLIO(ORAL)	37,095	20%	28,725	15%	55,416	23%	21,238	9%	70,841	20%	69,987	20%	283,302	35%
SMALL POX	147	(*)	282	(*)	281	(*)	82	(*)	144	(*)	131	(*)	1,067	(*)
MEASELS	12,062	6%	2,699	1%	6,716	3%	2,213	1%	3,140	1%	3,109	1%	29,939	4%
RUBELLA	1,919	1%	2,526	1%	6,182	3%	2,066	1%	2,844	1%	2,960	1%	18,497	2%
MUMPS	1,634	1%	2,130	1%	4,455	2%	1,470	1%	2,361	1%	2,496	1%	14,546	2%
INFLUENZA	114	(*)	177	(*)	100	(*)	38	(*)	102	(*)	99	(*)	630	(*)
DPT	38,881	21%	31,512	17%	54,273	23%	22,661	10%	73,176	21%	72,859	21%	293,362	37%
POLIO/DPT	2	(*)	1	(*)	13,214	6%	6,510	3%	26	(*)	20	(*)	19,773	2%
MMR	12,998	7%	8,381	5%	16,086	7%	7,111	3%	16,656	5%	16,111	5%	77,343	10%
INVALID CODE	5,943	3%	6,723	4%	9,720	4%	5,991	3%	8,701	2%	7,546	2%	44,624	6%

(*) Percentage less than .5.
(**) Percent of health records recorded in the stream.
(***) Percent of total health records.

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TECHNICAL APPENDIX

A. Analysis of Enrollment Data

This section of the report describes the MSRTS educational and health records of migrant students who were enrolled in the Migrant Education Program during the academic years 1985 and 1986 and the 1986 summer school period.

MSRTS stores information on active students on three databases: an identification database, an education database and a health record database. The education and health databases are independent of one another and are often printed separately. The information contained in the identification database is usually appended to the education database when a students education records are requested. Data on students, who have not been active MEP participants for a period of two years, are maintained on a set of archive tapes.

The MSRTS databases, abstracted for ASI analysis, were organized by *enrollments*, not by students. Each time a student enrolled in a participating school, either in his home district or any other district with an ME program, a new data record was created for that student. Thus, a student may have had several records (at least one for each academic year and a potential for one for the summer school period); each linked to the others by an MSRTS identification number.

The Identification database contained information related to the student's profile: age, grade, migrant status, date of birth, place of birth, and home base state.

The Education extract database contained all the information concerning students' educational progress including supplemental program data, skills information and student achievement test data. This file, like the other MSRTS files, was arranged by enrollments, not by students. Each student had a separate record for each enrollment. The records of specific students were identified by an eight digit identification number and a three letter mnemonic identifier. Specific enrollments of a student were identified by a school history line identification -- a two character identifier associated with a specific enrollment. As students may have had more than one enrollment this identifier has the added function of organizing the enrollments alphabetically in the order that the enrollments were entered into the database.

There were 806,249 enrollments in the education database for the two year period (two regular school years and the intervening summer term) covered by this analysis. These enrollments represented the records of 357,745 students currently active in the Migrant Education Program.

B. Procedures for Analysis of Test Data

The following eight steps were used for the analysis of the test data:

1. *Remove all "out of time period" records.*

The data tapes obtained from MSRTS contained all active student records for fiscal years 1984, 1985, and 1986. The analysis period selected for this study were the academic years 1984, the 1985 summer school term and academic year 1985. Enrollment records, test records and supplemental project enrollment records falling outside this period were deleted from the sample. An exception was made to include programs and enrollments that began before the cut off date but continued into the analysis period. These records were included on the grounds that these programs were provided during the analysis period.

2. *Delete tests not included in the sample.*

Because they represented at least one percent of all recorded tests, ten tests were selected for inclusion in the analysis sample. All other achievement tests were excluded from further consideration in this analysis.

3. *Determine number of tests with missing or invalid test score types, test forms and test levels.*

Five fields of test data were examined. The following are descriptions of the data in each field:

- *test code* was a five digit number that identified the test that was taken. On the student record the test name is generated from the test code so the code and test name were always in agreement. The test code was followed by the date on which the test was taken.

- *test type* was a one character field that identified the type of score that was reported for the test. Test scores could be entered in several different forms but only one form could be used for each test. The test score type field contained information as to how the score is reported. This field was used to assess the validity of the scores entered in the test score field. If a score was entered in a form inconsistent with the indicated score type the record was excluded from further analysis.

- *test form* identified the version of the test administered. The test form was a three character field. There were no codes for this field and the form was entered as defined by the test publisher.

- *test level* was a two character field and was entered according to the levels provided by the test publisher.

- *test score* was a ten character free format field containing the students' test score. Criterion referenced tests had a special twenty character field so that more information could be entered.

For the ten selected tests frequency distributions were performed to determine the nature and extent of uninterpretable data in the test records.

Student test data were evaluated as usable for a national study of achievement on the basis of the following criteria:

Completeness: In order to have been considered complete, the test record must have contained the test code, the date of administration, the test form the test level and the type of score entered. If a record was missing any of these data, the record was deleted from the sample.

Validity: All records in which the test form, test level or the type of score was not correct for the specific test were rejected. Those tests in which the test score was not reported in a form congruent with the test score type were also eliminated.

4. *Delete all tests with invalid or missing test score types, test forms and test levels.*

5. *Delete tests with invalid test scores as indicated by test score type.*

Test scores that were recorded in a manner incompatible with the test score type reported on the record were eliminated at this step. Scores that were entered as character, rather than numerical data, were also eliminated.

6. *Match complete test records for each of the ten tests by identification number.*

Matching the test records by identification number yielded the number of individuals with one or more complete test records. These records were only usable for a pretest posttest analysis if there were two or more complete records for the same achievement test per student. Students with only one record for a given test were eliminated.

7. *Merge test record file of usable test records with supplemental program file.*

This step yielded two groups of students:

- Those who had usable test data and had received educational services relevant to the discipline tested (e.g., reading or mathematics), and

- Those with usable tests but who did not have a supplemental program.

8. *The merged dataset was then sorted to generate four groups.*

- Students with two reading tests and a supplemental reading program.
- Students with two reading tests but no supplemental reading program.
- Students with two math test and a supplemental math program.
- Students with two math tests but no supplemental math program.

The Sample of Tests

The achievement test data were organized by enrollments. Each achievement test that a student had taken was entered according to its associated enrollment. If a student took more than one test during an enrollment, each test was entered as a separate record.

The number of students with each achievement test discussed below do not represent unduplicated counts (Table T-1). Students were counted once for each test (SAT Reading, CTBS reading, CTBS Math) that they had taken.

The Comprehensive Tests of Basic Skills (CTBS), in forms S, T, U, and V, was the most commonly used test in the MSRTS database. The CTBS Reading test accounted for 16 percent of all *test records* in the analysis period; the CTBS math accounted for 15 percent. Sixteen percent of the *students* with enrollment data in the MSRTS database had taken the CTBS reading achievement test and 15 percent had taken the CTBS math achievement test.

TABLE T-1

NUMBER OF MAJOR ACHIEVEMENT TESTS REPORTED ON MSRTS
AND
NUMBER OF INDIVIDUALS REPRESENTED BY THESE TESTS

TEST TYPE	NUMBER OF TESTS	PERCENT OF ALL TESTS	NUMBER OF INDIVIDUALS	PERCENT OF ALL STUDENTS TESTED
CTBS				
READING	82,192	16%	56,074	37%
MATH	79,537	15%	54,289	36%
SAT				
READING	19,688	4%	14,465	10%
MATH	20,954	4%	15,246	10%
CAT				
READING	40,950	8%	29,986	20%
MATH	38,043	7%	27,733	18%
WRAT				
READING	6,097	1%	4,532	3%
MATH	7,302	1%	5,632	4%
ITBS				
READING	12,587	2%	8,859	6%
MATH	12,505	2%	8,834	6%

The California Achievement Test (CAT) was the second most commonly used test in the Migrant Education program. CAT accounted for 15 percent of the achievement *test records;* the reading test for 8 percent, the math for 7 percent. Eight percent of the *students* had taken the CAT Reading test and 8 percent had taken the CAT math test. Both the new edition (forms E and F)and the older version (forms C and D) were represented in the database.

The Stanford Achievement Test (SAT), in Forms A, B, E, and F, was the third most commonly used test in MEP accounting for 8 percent of the *records.* Reading tests and math tests each comprised 4 percent of the total number of tests. Four percent of the *students* had taken the SAT reading test and the SAT math test.

The Iowa Tests of Basic Skills (ITBS), representing 4 percent of the *test records* was found in Forms 7, 8, G and H. ITBS reading and math tests each made up 2 percent of the total number of test records contained in MSRTS. The ITBS reading and math tests each accounted for 2 percent of the *students* in the MSRTS database.

The Wide Range Achievement Test (WRAT) is published in only one form. WRAT comprised two percent of all *test records.* Reading and math tests each accounted for 1 percent of the total number of tests; 1 percent of the *students* with reading tests and 2 percent of those with math tests.

Types of Test Scores Reported on MSRTS

Forty-four percent of MSRTS test scores were recorded as Grade Equivalent scores (see Tables T-2 and T-3). Several limitations hamper the use of grade equivalent scores for measuring student achievement. Grade equivalent scores provide little information about the relative standing of the students who have taken the test. It is not clear that if a child has scored on grade level this means that he/she is at the norm for his class, above it or below it. Grade equivalent scores are also easily misinterpreted. A third grader who is "reading at the sixth grade level" is not likely to know the same things as a sixth grader reading at the sixth grade level.

Thirty-three percent (33%) of the scores were reported as percentile scores. Percentiles are easy to calculate and easy to interpret. Comparisons among individuals and groups are also relatively straight forward. Percentile scores, however, are limited by the fact that the size of the difference between two consecutive percentile ranks is not constant. Consequently a difference of five percentile ranks means different things at different points of the score distribution.

TABLE T-2

TEST SCORE TYPES RECORDED ON THE MSRTS DATABASE

SCORE TYPE	NUMBER OF ACHIEVEMENT TESTS	PERCENT OF TOTAL
CRITERION REFERENCED	40,751	8%
GRADE EQUIVALENT	236,290	44%
NORMAL CURVE EQUIVALENT	51,674	10%
PERCENTILE	173,481	33%
RAW SCORE	21,345	4%
STANINE	5,102	1%
INVAILD SCORE TYPE	2,021	(*)
TOTAL	530,664	100%

(*) Percentage is less than .5.

TABLE T-3

TESTSCORE TYPES

	CRITERION REFERENCED		GRADE EQUIVALENT		NORMAL CURVE EQUIVALENT (NCE)		PERCENTILE		RAW SCORE		STANINE		TOTAL	
TEST TYPE	N	%	N	%	N	%	N	%	N	%	N	%	N	%
CTBS														
READING	163	(*)	40,108	49%	7,821	10%	33,251	40%	729	1%	98	(*)	82,160	100%
MATH	140	(*)	39,344	50%	7,185	9%	31,983	40%	768	1%	98	(*)	79,505	100%
SAT														
READING	31	(*)	5,867	30%	1,898	10%	9,338	47%	1,398	7%	1,261	6%	19,687	100%
MATH	32	(*)	6,326	30%	1,778	8%	10,062	48%	1,382	7%	1,463	7%	21,040	100%
CAT														
READING	88	(*)	19,482	48%	5,558	14%	14,229	35%	1,553	4%	34	(*)	40,944	100%
MATH	78	(*)	18,642	49%	4,860	13%	13,318	35%	1,090	3%	32	(*)	38,037	100%
WRAT														
READING	4	(*)	3,414	56%	1,231	20%	322	5%	820	13%	306	5%	6,097	100%
MATH	1	(*)	3,482	48%	1,198	16%	188	3%	2,133	29%	300	4%	7,302	100%
ITBS														
READING	10	(*)	9,909	79%	46	(*)	2,583	20%	8	(*)	31	(*)	12,587	100%
MATH	3	(*)	9,480	78%	51	(*)	2,533	20%	3	(*)	75	1%	12,145	100%

(*) Less than .5 percent.

Normal Curve Equivalent scores (NCEs) were designed to overcome the limitations of percentiles. Each NCE defines an equal area of a normal curve distribution. Ten percent (10%) of the scores in the MSRTS database were recorded in Normal Curve Equivalents.

Eight percent (8%) of the achievement test results were reported as Criterion Reference Scores. These scores were entered in a twenty character free format field. Coding these scores in a manner consistent with statistical analysis would have been prohibitively time consuming. Consequently tests reported with Criterion Referenced Scores were not included in this analysis.

Criteria for Assessing Achievement Tests

The achievement tests selected for inclusion in the sample were assessed on the basis of the completeness of the test record and on the accuracy of data within five fields on the test record. A test record was considered complete if there was data in all five fields. The record was considered accurate if that information was internally consistent.

Test records were eliminated for lacking information in one or more of the test data fields or if that information was invalid for that test and score type. Tables T-4 and T-5 report the number of test records with incorrect or missing data in particular fields. The primary causes of exclusion from further analysis were reporting invalid test forms and test levels, or failure to provide information for these data fields.

Problems with invalid or missing data in the test form field were found in 14 percent of the test records in the sample (see Table T-5). The test forms were incorrectly entered in 5 percent of the cases and the information was missing in another 9 percent. The tests sampled differed in the percentage of records rejected and the reasons for rejection. The SAT showed the highest rate of rejection for test form irregularities. The WRAT, since it is published in only one form, showed the lowest rate of rejection.

Invalid or missing data was found most frequently in the test level field. Seventeen percent of the test records in the sample had unusable data in that field. In 8 percent of the cases the data was invalid and in an additional 9 percent of the cases, it was missing. The SAT showed the highest rate of elimination of records for problems with the test level and the ITBS the lowest.

TABLE T-4

PERCENT OF ACHIEVEMENT TESTS WITH VALID
DATA ENTRIES FOR TEST FORMS, LEVELS AND SCORES

TEST TYPE	FORMS N	FORMS %	LEVELS N	LEVELS %	SCORES N	SCORES %
CTBS						
READING (82192)	70,542	86%	72,645	88%	78,475	96%
MATH (79537)	67,882	85%	69,916	88%	76,037	96%
SAT						
READING (19688)	15,263	78%	10,269	52%	16,968	86%
MATH (20954)	16,702	80%	10,643	51%	18,394	88%
CAT						
READING (40950)	36,148	88%	35,832	88%	38,972	95%
MATH (38043)	33,479	88%	33,364	88%	36,247	95%
WRAT						
READING (6097)	6,097	100%	3,698	61%	4,650	76%
MATH (7302)	7,302	100%	4,669	64%	5,967	81%
ITBS						
READING (12587)	10,532	84%	11,644	93%	11,933	95%
MATH (12505)	10,443	84%	11,512	92%	11,899	95%
TOTAL (319,855)	274,390	86%	264,192	83%	299,542	94%

TABLE T-5

ACHIEVEMENT TESTS WITH INVALID
DATA ENTRIES FOR TEST FORMS AND LEVELS

	TESTLEVEL				TESTFORMS			
	INVALID		MISSING		INVALID		MISSING	
TEST TYPE	N	%	N	%	N	%	N	%
CTBS								
READING	2,058	3%	7,489	9%	4,120	5%	7,530	9%
MATH	2,024	3%	7,597	9%	3,992	5%	7,663	10%
SAT								
READING	7,145	36%	2,274	12%	1,733	9%	2,692	14%
MATH	8,139	39%	2,172	10%	1,715	8%	2,537	12%
CAT								
READING	2,564	6%	2,554	6%	1,324	3%	3,478	8%
MATH	2,337	6%	2,342	6%	1,181	3%	3,383	9%
WRAT								
READING	893	15%	1,506	25%	0	0%	0	0%
MATH	699	10%	1,506	26%	0	0%	0	0%
ITBS								
READING	305	2%	638	5%	1,000	8%	1,055	8%
MATH	298	2%	695	6%	994	8%	1,068	9%
TOTAL	26,462	8%	28,773	9%	16,059	5%	29,406	9%

TABLE T-6

TEST WITH COMPLETE DATA FIELDS

	COMPLETE FIELDS											
	NONE		ONE		TWO		THREE		FOUR		TOTAL	
TEST TYPE	N	%	N	%	N	%	N	%	N	%	N	%
CTBS												
READING	0	0%	746	1%	7,649	9%	7,286	8%	66,510	81%	82,192	100%
MATH	1	(*)	968	1%	7,626	9%	6,761	8%	64,281	81%	79,637	100%
SAT												
READING	0	0%	490	2%	3,703	19%	7,850	40%	7,646	39%	19,688	100%
MATH	0	0%	449	2%	3,547	17%	8,926	43%	8,032	38%	20,954	100%
CAT												
READING	0	0%	240	1%	3,967	10%	3,250	8%	33,493	82%	40,950	100%
MATH	0	0%	232	1%	3,740	10%	2,869	8%	31,202	82%	38,043	100%
WRAT												
READING	0	0%	0	0%	427	7%	2,992	49%	2,678	43%	6,097	100%
MATH	0	0%	0	0%	334	5%	3,340	46%	3,628	50%	7,302	100%
ITBS												
READING	0	0%	28	(*)	829	7%	2,378	19%	9,352	74%	12,587	100%
MATH	0	0%	28	(*)	896	7%	2,373	18%	9,308	74%	12,605	100%

(*) Percentages less than .5.

Very few test records were rejected for reporting an invalid test score type: 0.3 percent of all test records. Records were excluded if (1) the score was reported in a form inappropriate form for the test score type, (2) percentile scores contained a decimal place, (3) Grade equivalent scores were entered as whole numbers, or (4) scores were entered as narrative.

Two of the tests selected for the analysis had unique problems. The SAT showed the highest rate of rejection due to a high incidence of invalid test levels. Unlike other tests, the SAT levels are not numeric or single letters. The levels are named: SESAT, PRIMARY, TASK, ADVANCED and numbered within each level: Primary 1, Primary 2, Primary 3. MSRTS allows a two byte field for test level. Since the level must be abbreviated to be entered there is considerable room for error. A test whose level had been entered as "PR" could not be identified as one of the primary levels of the SAT, and was deleted from the sample. Although the WRAT showed similar problems, no records were deleted.

Determining the Number of Students with Usable Tests

The 236,139 complete achievement test records (see Table T-7) were sorted by test code and separate files created for each test in the sample. Each of these files was then sorted by the student identification number to determine the number of students who had two or more complete test records for each test within the sample. This yielded the number of students with two or more usable test records for each achievement test in the sample. These were not unduplicated counts. Students could have taken several different tests more than once and assigning students to specific tests at this point would have decreased the sample size for some of the tests. Unduplicated counts of students with two usable tests were determined after the separate test files were merged. These data were reported in Section IV of this report.

TABLE T-7

NUMBER OF COMPLETE TEST RECORDS BY TEST TYPE

TEST TYPE	COMPLETE TESTS N	INDIVIDUALS WITH ONE COMPLETE TEST N	%	INDIVIDUALS WITH TWO OR MORE COMPLETE TESTS N	%
CTBS					
READING	66,510	46,068	82%	17,079	30%
MATH	64,292	44,598	82%	16,408	30%
SAT					
READING	7,645	6,036	42%	1,541	11%
MATH	8,032	6,395	42%	1,568	10%
CAT					
READING	33,493	24,817	83%	7,212	24%
MATH	31,202	23,020	83%	6,793	25%
WRAT					
READING	2,678	2,196	48%	430	9%
MATH	3,628	2,962	53%	584	10%
ITBS					
READING	9,355	6,955	78%	2,392	27%
MATH	9,308	6,973	79%	2,332	26%

note: Percentages are based on the number of test records for that test type.

APPENDIX A: PROPORTIONS OF STUDENTS RECEIVING SUPPLEMENTAL SERVICES AND MEP FUNDED SERVICES BY MIGRANT STREAM AND STATUS AND BY GRADE

TABLE A-1

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES
BY GRADE AND STATUS: EASTERN STREAM
(SEPT. 1984-JUNE 1986)

	CURRENT		FORMER	
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	STUDENTS	PERCENT RECEIVING SERVICES*
PO	361	26%	13	38%
P1	495	19%	58	22%
P2	577	25%	238	21%
P3	1,465	74%	534	45%
P4	1,965	110%	867	77%
P5	304	34%	327	42%
K	3,734	69%	3,653	61%
01	4,231	70%	4,764	64%
02	3,418	69%	4,689	60%
03	3,195	64%	4,916	58%
04	3,179	64%	4,372	59%
05	2,938	63%	4,478	58%
06	2,848	61%	4,213	58%
07	2,774	56%	4,001	51%
08	2,294	50%	3,659	48%
09	1,834	39%	3,070	40%
10	1,032	36%	2,398	36%
11	635	28%	1,580	33%
12	268	28%	739	28%
UNGRADED	1,704	51%	1,769	62%
TOTAL	39,251	62%	50,338	54%

(*) Percentages are based on the number of enrolled students in that cell receiving supplemental services.

TABLE A-2

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES
BY GRADE AND STATUS: MIDWESTERN STREAM
(SEPT. 1984-JUNE 1986)

	CURRENT		FORMER	
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	STUDENTS	PERCENT RECEIVING SERVICES*
P0	284	59%	1	100%
P1	503	48%	16	44%
P2	555	55%	69	51%
P3	723	61%	177	52%
P4	1,657	49%	985	33%
P5	712	72%	446	45%
K	4,123	60%	3,478	44%
01	5,015	63%	4,404	44%
02	4,556	66%	4,514	44%
03	4,484	64%	4,726	40%
04	4,510	64%	4,353	41%
05	4,596	64%	4,237	41%
06	4,685	61%	4,035	40%
07	4,753	56%	3,897	36%
08	4,420	62%	3,580	34%
09	4,577	38%	3,379	21%
10	2,999	33%	2,396	22%
11	2,156	28%	1,940	18%
12	1,130	19%	1,045	14%
UNGRADED	1,786	62%	1,172	11%
TOTAL	58,224	56%	48,850	36%

TABLE A-3

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES
BY GRADE AND STATUS: WESTERN STREAM
(SEPT. 1984-JUNE 1986)

	CURRENT		FORMER	
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	STUDENTS	PERCENT RECEIVING SERVICES*
P0	474	24%	11	64%
P1	832	19%	134	13%
P2	980	23%	241	7%
P3	1,213	24%	462	19%
P4	1,460	31%	912	34%
P5	559	33%	322	26%
K	7,288	79%	7,954	84%
01	6,978	82%	9,268	85%
02	6,100	82%	8,909	84%
03	6,100	81%	8,962	83%
04	5,851	81%	8,691	83%
05	5,556	80%	8,281	81%
06	5,113	79%	7,638	79%
07	4,789	74%	7,161	76%
08	4,048	74%	6,611	75%
09	4,261	66%	5,939	67%
10	3,145	63%	5,228	67%
11	2,198	66%	4,074	64%
12	742	52%	1,174	60%
UNGRADED	694	41%	512	44%
TOTAL	68,381	73%	92,484	77%

(*) Percentages are based on the number of enrolled students in that cell receiving supplemental services.

TABLE A-4

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES AND MIGRANT FUNDED SUPPLEMENTAL SERVICES BY GRADE, MIGRANT STREAM AND STATUS: EASTERN STREAM (AUG. 1985-JUNE 1986)

	C U R R E N T			F O R M E R		
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**
P0	239	15%	13%	12	33%	33%
P1	359	8%	8%	55	20%	20%
P2	413	13%	13%	222	16%	16%
P3	1,172	70%	53%	474	38%	36%
P4	1,841	80%	66%	786	58%	49%
P5	288	28%	27%	276	30%	30%
K	3,530	57%	51%	3,488	50%	46%
01	4,028	60%	50%	4,524	53%	46%
02	3,271	57%	46%	4,436	50%	42%
03	3,042	54%	43%	4,666	49%	40%
04	3,003	56%	46%	4,144	49%	41%
05	2,777	54%	44%	4,246	49%	41%
06	2,694	50%	44%	3,972	48%	42%
07	2,572	45%	37%	3,752	43%	38%
08	2,118	39%	33%	3,435	40%	34%
09	1,652	31%	28%	2,803	33%	29%
10	949	28%	24%	2,204	30%	26%
11	596	25%	23%	1,451	28%	24%
12	216	28%	24%	585	26%	24%
UG	1,222	46%	46%	1,441	52%	50%
TOTAL	35,982	51%	43%	46,972	45%	39%

(*) Percentages are based on the number of students in that cell receiving supplemental services.
(**) Percentages are based on the number of students in that cell receiving MEP funded services.

TABLE A-5

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES AND MIGRANT FUNDED SUPPLEMENTAL SERVICES BY GRADE, MIGRANT STREAM AND STATUS: MIDWESTERN STREAM (AUG. 1985-JUNE 1986)

	C U R R E N T			F O R M E R		
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**
PO	143	84%	84%	1	100%	100%
P1	283	54%	54%	14	36%	29%
P2	259	67%	66%	43	60%	60%
P3	288	75%	73%	90	50%	51%
P4	1,189	42%	24%	815	27%	18%
P5	529	38%	34%	301	33%	32%
K	3,568	56%	36%	3,165	42%	30%
01	4,320	55%	30%	3,988	42%	27%
02	3,913	56%	30%	4,102	42%	26%
03	3,905	56%	30%	4,260	39%	23%
04	3,883	56%	28%	3,950	40%	24%
05	3,978	54%	26%	3,858	39%	23%
06	4,099	51%	23%	3,668	36%	22%
07	4,140	46%	19%	3,549	34%	19%
08	3,803	46%	19%	3,250	30%	18%
09	4,001	28%	14%	3,048	20%	14%
10	2,660	24%	15%	2,200	21%	15%
11	1,983	22%	14%	1,849	18%	13%
12	953	18%	9%	933	15%	10%
UG	1,041	69%	70%	857	11%	8%
TOTAL	48,938	48%	26%	43,941	34%	22%

(*) Percentages are based on the number of students in that cell receiving supplemental services.
(**) Percentages are based on the number of students in that cell receiving MEP funded services.

TABLE A-6

PERCENT OF STUDENTS RECEIVING SUPPLEMENTAL PROGRAM SERVICES AND MIGRANT FUNDED SUPPLEMENTAL SERVICES BY GRADE, MIGRANT STREAM AND STATUS: WESTERN STREAM (AUG. 1985-JUNE 1986)

	C U R R E N T			F O R M E R		
GRADE	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**	STUDENTS	PERCENT RECEIVING SERVICES*	PERCENT MIGRANT FUNDED**
PO	367	22%	11%	10	10%	0%
P1	664	17%	10%	109	11%	9%
P2	743	21%	8%	186	7%	5%
P3	954	22%	11%	364	18%	9%
P4	1,248	27%	17%	753	32%	23%
P5	507	33%	20%	293	24%	19%
K	6,832	74%	65%	7,576	78%	69%
01	6,640	75%	65%	8,853	79%	70%
02	5,796	76%	65%	8,536	78%	69%
03	5,799	74%	64%	8,573	77%	68%
04	5,572	74%	66%	8,372	77%	69%
05	5,315	74%	66%	7,965	74%	66%
06	4,856	72%	64%	7,289	73%	66%
07	4,538	68%	62%	6,876	71%	65%
08	3,775	67%	61%	6,270	69%	63%
09	4,056	61%	56%	5,658	64%	60%
10	3,020	59%	53%	5,035	64%	60%
11	2,140	62%	56%	3,997	63%	59%
12	710	53%	48%	1,140	59%	55%
UG	510	49%	46%	414	50%	45%
TOTAL	64,042	68%	59%	88,269	72%	65%

(*) Percentages are based on the number of students in that cell receiving supplemental services.
(**) Percentages are based on the number of students in that cell receiving MEP funded services.

APPENDIX B: ACHIEVEMENT TESTS PER STUDENT BY GRADE

TABLE B-1

NUMBER OF TESTS PER STUDENT
BY GRADE
CAT-READING

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
K	929	74	310	25	17	1	4	0	0	0	1,260	4
P1	3	75	1	25	0	0	0	0	0	0	4	(*)
P4	5	83	1	17	0	0	0	0	0	0	6	(*)
P5	127	73	43	25	4	2	0	0	0	0	174	(*)
01	2,166	70	809	26	91	3	33	1	1	(*)	3,100	10
02	2,327	67	996	28	122	4	41	1	1	(*)	3,487	12
03	2,275	66	971	28	127	4	55	2	1	(*)	3,429	11
04	2,328	65	1,043	29	120	3	74	2	2	(*)	3,567	12
05	2,181	66	952	29	85	2	65	2	4	(*)	3,287	11
06	2,141	68	849	27	110	4	43	1	0	0	3,143	10
07	1,949	71	711	26	64	2	28	1	0	0	2,752	9
08	1,662	77	418	19	49	2	16	(*)	0	0	2,145	7
09	1,234	69	449	25	84	5	19	1	0	0	1,786	6
10	855	71	284	24	53	4	13	1	0	0	1,205	4
11	426	90	40	8	5	1	1	(*)	0	0	472	2
12	66	94	3	4	1	1	0	0	0	0	70	(*)
UG	53	88	7	12	0	0	0	0	0	0	60	(*)
TOTAL	20,727	69	7,887	26	932	3	392	3	9	(*)	29,947	100

(*) Less than .5 percent.

TABLE B-2

NUMBER OF TESTS PER STUDENT
BY GRADE
CTBS- READING

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
P0	0	0	0	0	0	0	0	0	0	0	0	0
P1	5	36	9	64	0	0	0	0	0	0	14	(*)
P2	1	100	0	0	0	0	0	0	0	0	1	(*)
P3	0	0	0	0	0	0	0	0	0	0	0	0
P4	6	86	1	14	0	0	0	0	0	0	7	(*)
P5	57	65	31	35	0	0	0	0	0	0	88	(*)
K	2,024	67	841	28	132	4	25	2	0	0	3,022	5
01	4,668	64	2,192	30	303	4	107	1	0	0	7,270	13
02	3,986	58	2,404	35	297	14	140	2	2	(*)	6,829	12
03	3,623	56	2,425	37	284	4	192	3	2	(*)	6,526	12
04	3,464	53	2,503	38	304	5	228	4	2	(*)	6,501	12
05	3,506	56	2,277	36	297	5	224	4	0	0	6,304	11
06	3,273	56	2,097	36	281	5	182	3	1	(*)	5,834	10
07	3,373	66	1,512	29	143	3	101	2	3	(*)	5,132	9
08	2,676	76	819	23	41	1	3	0	0	0	3,539	6
09	1,915	77	535	21	38	2	3	0	0	0	2,491	4
10	1,192	72	425	26	28	2	0	0	0	0	1,645	3
11	620	90	72	10	0	0	0	0	0	0	692	1
12	83	97	3	3	0	0	0	0	0	0	86	(*)
UG	35	90	4	10	0	0	0	0	0	0	39	(*)
TOTAL	34,507	62	18,150	32	2,148	4	1,205	2	10	(*)	56,020	100

(*) Less than .5 percent.

TABLE B-3

NUMBER OF TESTS PER STUDENT
BY GRADE
ITBS-READING

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	TOTAL N	TOTAL %
K	104	73	39	27	0	0	143	2
P4	1	100	0	0	0	0	1	(*)
P5	0	0	1	100	0	0	1	(*)
01	891	65	479	35	0	0	1,370	15
02	649	53	572	47	3	(*)	1,224	14
03	569	51	543	49	3	(*)	1,115	12
04	587	51	564	49	4	(*)	1,155	13
05	449	48	534	52	3	(*)	986	12
06	504	50	502	50	3	(*)	1,009	11
07	519	54	441	46	3	(*)	963	11
08	724	98	12	2	0	0	736	8
09	53	100	0	0	0	0	53	(*)
10	19	100	0	0	0	0	19	(*)
11	12	(*)	0	0	0	0	12	(*)
UG	18	86	3	14	0	0	21	(*)
TOTAL	5,099	58	3,690	42	19	(*)	8,808	100

(*) Less than .5 percent.

TABLE B-4

NUMBER OF TESTS PER STUDENTS
BY GRADE
SAT-READING

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	TOTAL N	TOTAL %
P1	0	0	1	100	0	0	0	0	1	(*)
P3	0	0	0	0	0	0	0	0	0	0
P4	3	100	0	0	0	0	0	0	3	(*)
P5	10	100	0	0	0	0	0	0	10	(*)
K	578	68	226	26	42	5	5	6	851	6
01	1,053	68	446	29	40	2	6	(*)	1,545	11
02	1,412	68	591	28	70	3	13	(*)	2,086	14
03	1,226	62	661	33	67	3	20	1	1,974	14
04	1,056	59	650	36	56	3	40	2	1,802	12
05	1,029	61	571	34	49	3	42	2	1,691	12
06	1,248	76	334	20	43	3	7	(*)	1,632	11
07	698	75	220	24	11	1	2	(*)	931	6
08	440	80	94	17	15	3	1	(*)	550	4
09	519	86	83	14	4	0	0	0	606	4
10	395	77	115	22	4	0	0	0	514	4
11	194	91	19	9	0	0	0	0	213	1
12	33	97	1	3	0	0	0	0	34	(*)
UG	20	95	1	5	0	0	0	0	21	(*)
TOTAL	9,914	68	4,013	28	401	3	136	(*)	14,464	100

(*) Less than .5 percent.

TABLE B-5

NUMBER OF TESTS PER STUDENT
BY GRADE
WRAT-READING

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
K	248	67	94	25	26	7	4	1	0	0	372	8
P3	0	0	1	100	0	0	0	0	0	0	1	(*)
P4	7	64	4	36	0	0	0	0	0	0	11	(*)
P5	6	75	2	25	0	0	0	0	0	0	8	(*)
01	528	73	136	19	47	6	12	2	1	(*)	724	16
02	417	71	124	21	37	6	10	2	0	0	588	13
03	438	73	124	20	34	6	7	1	0	0	603	13
04	444	72	142	23	25	4	7	1	0	0	618	14
05	362	73	102	21	25	5	6	1	0	0	495	11
06	315	78	68	17	19	5	0	0	0	0	402	9
07	187	78	40	17	9	4	5	2	0	0	241	5
08	118	73	40	25	3	2	1	(*)	0	0	162	4
09	67	70	25	26	4	4	0	0	0	0	96	2
10	38	69	14	25	3	5	0	0	0	0	55	1
11	13	100	0	0	0	0	0	0	0	0	13	(*)
12	2	100	0	0	0	0	0	0	0	0	2	(*)
UG	121	86	16	11	3	2	1	(*)	0	0	141	3
TOTAL	3,311	73	1,864	20	235	5	53	1	1	(*)	9,966	100

(*) Less than .5 percent.

TABLE B-6

NUMBER OF TESTS PER STUDENT
BY GRADE
CAT-MATH

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
K	756	72	265	25	27	2	0	0	0	0	1,048	4
P1	2	67	1	33	0	0	0	0	0	0	3	(*)
P4	5	83	1	17	0	0	0	0	0	0	6	(*)
P5	122	72	43	25	4	2	0	0	0	0	169	(*)
01	1,941	69	765	27	86	3	23	(*)	0	0	2,815	10
02	2,090	66	943	30	114	4	39	1	1	(*)	3,187	12
03	2,045	66	876	28	120	4	52	2	1	(*)	3,094	11
04	2,110	65	945	29	105	3	71	2	2	(*)	3,233	12
05	2,060	66	902	29	81	3	59	2	2	(*)	3,104	11
06	1,964	67	802	27	106	4	45	2	1	(*)	2,918	10
07	1,827	71	656	25	62	2	31	1	0	0	2,576	9
08	1,588	77	417	20	46	2	18	(*)	0	0	2,069	7
09	1,172	68	439	26	82	5	20	1	2	(*)	1,715	6
10	854	73	248	21	51	4	16	1	1	(*)	1,170	4
11	419	89	45	10	5	1	1	(*)	0	0	470	2
12	73	94	4	5	1	1	0	0	0	0	78	(*)
UG	32	73	12	27	0	0	0	0	0	0	44	(*)
TOTAL	19,060	69	7,364	26	890	3	375	1	10	(*)	27,699	100

(*) Less than .5 percent.

TABLE B-7

NUMBER OF TESTS PER STUDENT
BY GRADE
CTBS- MATH

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
PO	0	0	0	0	0	0	0	0	0	0	0	0
P1	4	31	8	62	1	8	0	0	0	0	13	(*)
P2	1	100	0	0	0	0	0	0	0	0	1	(*)
P3	0	0	0	0	0	0	0	0	0	0	0	0
P4	7	88	1	12	0	0	0	0	0	0	8	(*)
P5	46	63	27	37	0	0	0	0	0	0	73	(*)
K	1,698	64	780	29	134	5	54	2	0	0	2,666	5
01	4,302	64	2,066	31	266	4	104	2	1	(*)	6,739	12
02	4,003	59	2,358	35	286	4	141	2	0	0	6,788	13
03	3,579	56	2,367	37	287	4	181	3	1	(*)	6,415	12
04	3,425	53	2,474	39	299	5	223	3	0	0	6,421	12
05	3,527	57	2,192	35	292	5	220	4	0	0	6,231	11
06	3,281	57	1,991	35	272	5	183	3	1	(*)	5,728	11
07	3,371	67	1,432	28	134	3	96	2	1	(*)	5,034	9
08	2,711	78	739	21	41	1	0	0	0	0	3,491	6
09	1,740	75	522	23	40	2	5	(*)	0	0	2,307	4
10	1,124	72	407	26	22	1	1	0	0	0	1,554	3
11	595	89	72	11	0	0	0	0	0	0	667	1
12	81	96	3	4	0	0	0	0	0	0	84	(*)
UG	33	89	4	11	0	0	0	0	0	0	0	(*)
TOTAL	33,495	62	17,439	32	2,074	4	1,208	2	4	(*)	54,220	100

(*) Less than .5 percent.

TABLE B-8

NUMBER OF TESTS PER STUDENT
BY GRADE
ITBS-MATH

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	TOTAL N	TOTAL %
K	157	75	52	25	0	0	209	2
P4	1	100	0	0	0	0	1	(*)
P5	5	100	0	0	0	0	5	(*)
01	872	65	470	35	1	(*)	1,343	15
02	640	53	558	46	2	(*)	1,200	14
03	577	52	539	48	3	(*)	1,119	13
04	585	51	556	49	3	(*)	1,144	13
05	497	48	529	51	3	(*)	1,029	12
06	492	50	493	50	2	(*)	987	11
07	534	55	429	44	1	(*)	964	11
08	721	98	11	2	0	0	732	8
09	53	100	0	0	0	0	53	(*)
10	20	100	0	0	0	0	20	(*)
11	12	100	0	0	0	0	12	(*)
UG	11	73	4	27	0	0	15	(*)
TOTAL	5,177	59	3,641	41	15	(*)	8,833	100

(*) Less than .5 percent.

TABLE B-9

NUMBER OF TESTS PER STUDENT
BY GRADE
SAT-MATH

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	TOTAL N	TOTAL %
K	484	66	211	29	37	5	4	0	736	5
P0	3	100	0	0	0	0	0	0	3	(*)
P1	0	0	1	100	0	0	0	0	1	(*)
P3	0	0	1	100	0	0	0	0	1	(*)
P4	2	100	0	0	0	0	0	0	2	(*)
P5	9	100	0	0	0	0	0	0	9	(*)
01	1,160	68	510	30	33	2	7	(*)	1,710	11
02	1,369	67	620	30	48	2	17	(*)	2,054	13
03	1,178	61	671	35	54	3	17	(*)	1,920	12
04	1,103	59	671	36	54	3	35	2	1,863	12
05	1,045	61	576	34	54	3	42	2	1,717	11
06	1,084	65	501	30	63	4	8	(*)	1,656	11
07	782	66	364	31	35	3	1	(*)	1,182	8
08	625	79	155	20	9	1	0	0	789	5
09	750	85	129	15	1	(*)	0	0	880	6
10	349	76	109	24	0	0	0	0	458	3
11	197	92	17	8	0	0	0	0	214	1
12	29	97	1	3	0	0	0	0	30	(*)
UG	19	90	2	10	0	0	0	0	21	(*)
TOTAL	10,188	67	4,539	28	388	2	131	(*)	15,246	100

(*) Less than .5 percent.

TABLE B-10

NUMBER OF TESTS PER STUDENT
BY GRADE
WRAT-MATH

GRADE	1 TEST N	1 TEST %	2 TESTS N	2 TESTS %	3 TESTS N	3 TESTS %	4 TESTS N	4 TESTS %	5 TESTS N	5 TESTS %	TOTAL N	TOTAL %
K	406	78	86	16	25	5	4	(*)	0	0	521	9
P0	14	100	0	0	0	0	0	0	0	0	14	(*)
P1	1	100	0	0	0	0	0	0	0	0	1	(*)
P3	0	0	1	100	0	0	0	0	0	0	1	(*)
P4	6	54	5	45	0	0	0	0	0	0	11	(*)
P5	9	90	1	10	0	0	0	0	0	0	10	(*)
01	655	75	149	17	50	6	17	2	1	(*)	872	15
02	555	76	131	18	35	5	9	1	0	0	730	13
03	639	78	135	16	35	4	7	(*)	0	0	816	14
04	589	76	151	19	27	3	11	1	0	0	778	14
05	461	77	102	17	28	5	8	1	0	0	599	11
06	399	79	88	17	20	4	0	0	0	0	507	9
07	241	79	48	16	11	4	4	1	0	0	304	5
08	124	75	36	22	5	3	1	(*)	0	0	166	3
09	63	68	26	28	4	4	0	0	0	0	93	2
10	38	70	13	24	3	6	0	0	0	0	54	(*)
11	13	100	0	0	0	0	0	0	0	0	13	(*)
12	2	100	0	0	0	0	0	0	0	0	2	(*)
UG	120	86	16	11	3	2	1	(*)	0	0	140	2
TOTAL	4,335	77	988	18	246	4	62	1	1	(*)	5,632	100

(*) Less than .5 percent.

APPENDIX C: ACHIEVEMENT TESTS PER STUDENT BY MIGRANT STATUS

TABLE C-1

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
CAT- READING

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	6,352	74	2,018	23	114	5	78	(*)	3	(*)	8,662	28
CURRENT INTRASTATE AGRICULTURE	5,356	74	1,714	24	166	3	62	(*)	0	0	7,278	24
FORMERLY MIGRANT AGRICULTURE	8,521	64	3,911	29	635	5	228	2	3	(*)	13,298	44
CURRENT INTERSTATE FISHING	79	60	49	37	2	2	2	2	0	0	132	(*)
CURRENT INTRASTATE FISHING	54	66	24	29	1	1	3	4	0	0	82	0
FORMERLY MIGRANT FISHING	403	64	172	27	24	4	32	5	3	(*)	634	2
TOTAL	20,765	69	7,888	26	932	3	392	1	9	(*)	29,986	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-2

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
CTBS- READING

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	9,151	64	4,626	32	313	2	138	(*)	1	(*)	14,229	25
CURRENT INTRASTATE AGRICULTURE	7,865	61	4,139	32	596	5	315	2	1	(*)	12,906	23
FORMERLY MIGRANT AGRICULTURE	16,962	60	9,217	33	1,236	4	749	3	8	(*)	28,174	50
CURRENT INTERSTATE FISHING	81	76	24	22	0	0	2	2	0	0	107	(*)
CURRENT INTRASTATE FISHING	127	76	41	24	0	0	0	0	0	0	168	(*)
FORMERLY MIGRANT FISHING	358	73	129	26	1	(*)	1	(*)	0	0	489	1
TOTAL	34,644	62	18,166	32	2,148	4	1,205	2	10	(*)	56,073	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-3

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
ITBS- READING

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	2,015	62	1,243	38	4	(*)	0	0	0	0	3,262	37
CURRENT INTRASTATE AGRICULTURE	735	67	355	32	3	(*)	0	0	0	0	1,093	12
FORMERLY MIGRANT AGRICULTURE	2,393	53	2,092	46	12	(*)	0	0	0	0	4,497	51
CURRENT INTERSTATE FISHING	3	100	0	0	0	0	0	0	0	0	3	(*)
CURRENT INTRASTATE FISHING	2	100	0	0	0	0	0	0	0	0	2	(*)
FORMERLY MIGRANT FISHING	2	100	0	0	0	0	0	0	0	0	2	(*)
TOTAL	5,150	58	3,690	42	19	(*)	0	0	0	0	8,859	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-4

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
SAT- READING

MIGRANT STATUS	1 TEST		2 TESTS		3 TESTS		4 TESTS		5 TESTS		TOTAL	
	N	%**	N	%**	N	%**	N	%**	N	%**	N	%***
CURRENT INTERSTATE AGRICULTURE	3,851	70	1,503	27	142	2	29	(*)	0	0	5,525	38
CURRENT INTRASTATE AGRICULTURE	1,662	66	773	31	73	5	16	(*)	0	0	2,524	17
FORMERLY MIGRANT AGRICULTURE	4,066	67	1,682	28	185	4	91	1	0	0	6,024	42
CURRENT INTERSTATE FISHING	60	86	10	14	0	0	0	0	0	0	70	(*)
CURRENT INTRASTATE FISHING	13	65	7	35	0	0	0	0	0	0	20	(*)
FORMERLY MIGRANT FISHING	263	87	38	12	1	(*)	0	0	0	0	302	2
TOTAL	9,915	68	4,013	28	401	3	136	1	0	0	14,465	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-5

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
WRAT- READING

MIGRANT STATUS	1 TEST		2 TESTS		3 TESTS		4 TESTS		5 TESTS		TOTAL	
	N	%**	N	%**	N	%**	N	%**	N	%**	N	%***
CURRENT INTERSTATE AGRICULTURE	1,050	76	260	19	66	5	4	0	1	(*)	1,381	30
CURRENT INTRASTATE AGRICULTURE	525	77	122	18	23	3	8	1	0	0	678	15
FORMERLY MIGRANT AGRICULTURE	1,724	70	550	22	146	6	41	2	0	0	2,461	54
CURRENT INTERSTATE FISHING	4	100	0	0	0	0	0	0	0	0	4	0
CURRENT INTRASTATE FISHING	0	0	0	0	0	0	0	0	0	0	0	0
FORMERLY MIGRANT FISHING	8	100	0	0	0	0	0	0	0	0	8	(*)
TOTAL	3,311	73	932	20	235	5	53	1	1	(*)	4,532	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-6

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
CAT- MATH

MIGRANT STATUS	1 TEST		2 TESTS		3 TESTS		4 TESTS		5 TESTS		TOTAL	
	N	%**	N	%**	N	%**	N	%**	N	%**	N	%***
CURRENT INTERSTATE AGRICULTURE	5,749	76	1,699	93	93	1	42	(*)	3	(*)	7,586	27
CURRENT INTRASTATE AGRICULTURE	4,821	74	1,533	141	141	2	47	(*)	0	0	6,542	24
FORMERLY MIGRANT AGRICULTURE	8,046	63	3,886	608	608	5	229	2	6	0	12,775	46
CURRENT INTERSTATE FISHING	73	56	48	10	10	8	0	0	0	0	131	(*)
CURRENT INTRASTATE FISHING	49	53	34	5	5	5	4	4	0	0	92	(*)
FORMERLY MIGRANT FISHING	356	58	165	33	33	6	53	9	1	0	607	2
TOTAL	19,093	69	7,365	26	890	3	375	1	10	(*)	27,733	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-7

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
CTBS- MATH

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	8,780	65	4,362	32	288	2	140	(*)	0	0	13,570	25
CURRENT INTRASTATE AGRICULTURE	7,708	62	3,916	31	569	4	312	2	0	0	12,503	23
FORMERLY MIGRANT AGRICULTURE	16,604	60	8,991	33	1,215	4	755	3	4	(*)	27,469	50
CURRENT INTERSTATE FISHING	77	78	21	21	0	0	0	0	0	0	98	(*)
CURRENT INTRASTATE FISHING	127	77	38	23	0	0	0	0	0	0	165	(*)
FORMERLY MIGRANT FISHING	367	74	123	25	2	(*)	1	(*)	0	0	493	1
TOTAL	33,661	62	17,451	32	2,074	4	1,208	2	4	(*)	54,298	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-8

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
ITBS- MATH

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %***	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	1,997	62	1,224	38	3	(*)	0	0	0	0	3224	36
CURRENT INTRASTATE AGRICULTURE	735	68	342	32	2	(*)	0	0	0	0	1079	12
FORMERLY MIGRANT AGRICULTURE	2,439	54	2,075	46	10	(*)	0	0	0	0	4524	51
CURRENT INTERSTATE FISHING	3	100	0	0	0	0	0	0	0	0	3	(*)
CURRENT INTRASTATE FISHING	2	100	0	0	0	0	0	0	0	0	2	(*)
FORMERLY MIGRANT FISHING	2	100	0	0	0	0	0	0	0	0	2	(*)
TOTAL	5,178	59	3,641	41	15	(*)	0	0	0	0	8834	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-9

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
SAT- MATH

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	3,864	58	1,592	28	166	3	32	(*)	0	0	5,666	37
CURRENT INTRASTATE AGRICULTURE	1,794	64	952	34	63	2	14	(*)	0	0	2,813	18
FORMERLY MIGRANT AGRICULTURE	4,165	66	1,864	30	176	3	84	1	0	0	6,289	41
CURRENT INTERSTATE FISHING	127	64	71	36	0	0	1	(*)	0	0	199	1
CURRENT INTRASTATE FISHING	13	65	7	35	0	0	0	0	0	0	20	(*)
FORMERLY MIGRANT FISHING	205	79	53	20	1	(*)	0	0	0	0	259	2
TOTAL	10,188	67	4,539	30	388	2	131	1	0	0	15,246	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

TABLE C-10

NUMBER OF TESTS PER STUDENT
BY MIGRANT STATUS
WRAT- MATH

MIGRANT STATUS	1 TEST N	1 TEST %**	2 TESTS N	2 TESTS %**	3 TESTS N	3 TESTS %**	4 TESTS N	4 TESTS %**	5 TESTS N	5 TESTS %**	TOTAL N	TOTAL %***
CURRENT INTERSTATE AGRICULTURE	1,062	65	247	18	67	5	5	(*)	1	(*)	1,382	24
CURRENT INTRASTATE AGRICULTURE	799	77	133	14	25	2	9	(*)	0	0	966	17
FORMERLY MIGRANT AGRICULTURE	2,469	83	607	18	154	5	48	1	0	0	3,278	58
CURRENT INTERSTATE FISHING	0	75	0	0	0	0	0	0	0	0	0	0
CURRENT INTRASTATE FISHING	1	100	0	0	0	0	0	0	0	0	1	(*)
FORMERLY MIGRANT FISHING	4	80	1	20	0	0	0	0	0	0	5	(*)
TOTAL	4,335	77	988	17	246	4	62	2	1	100	5,632	100

(*) Less than .5 percent.
(**) Percent of status.
(***) Percent of total.

APPENDIX D: SAMPLE MSRTS STUDENT RECORD

(5a) (17)

0000001 SEE E-H LINKAGES AR BBFS 00001

DATE 06/02/86 — M I G R A N T S T U D E N T E D U C A T I O N A L R E C O R D — PAGE 1 OF 4 — STUDENT ID 85223639 MNC

JONES, MARY C — DROPOUT 04/16/86 — 85223639 MNC

BIRTH DATA (1)
SEX = F
DOB = 04/16/67
VER = B
AGE = 19
MUL. BIRTH = 2
RACE = 2

PLACE OF BIRTH
SITE : CONWAY MEMORIAL HOSPI
ADDRESS: 1200 WESTERN AVENUE
CITY : CONWAY
ST/ZIP : AR 73201-0000
COUNTY : FAULKNER
COUNTRY:

TERMINATION
TYPE: 0
DATE: 04/16/86

F.L.G.: (4)
09/15/83
(ARBBDQ)

LAST QUALIFYING MOVE: 06/23/85 END OF ELIGIBILITY: 06/23/91
MOVED FROM: WASHINTON, DC,
MOVED TO: FENNVILLE, MI

PARENT DATA
LEGAL PARENTS: (13)
JONES, JOHN
JONES, MARY
CURRENT PARENTS:
SMITH, PAUL
SMITH, ANN

HOME BASE
218 DAVIS ST.
CONWAY
AR 73201-0000

CURRENT RESIDENCE
204 C STREET NW APT 4
WASHINGTON
DC 20004-0000

SCHOOL HISTORY DATA (3)
IL: ANNA MICHEN ELEME SCHL ID: MIBLHG
CORD ADDRESSEE: MONTCALM AREA INTER SCHOOL DIS
PREV SCHL: D C PUBLIC SCHLS SCHL ID: DCDBXV
MIGRANT EDUCATION (SH:AD)
415 12TH STREET NW
ROOM 1004
WASHINGTON
DC 20004-0000 (15)

SH	SCHL ID ST	SCHL	DATE RES.	DATE ENROLL	DATE WITHDR	DAYS ENR	DAYS PRS	DAYS %	GR LV	M S	E T
AA	AR	BBDQ	06/01/80	06/15/82	07/31/82	23	21	91	07	3	S
AB	AR	BBDQ	06/01/80	09/01/82	05/29/83	176	175	99	09	3	
AC	AR	BBDQ	06/01/80	09/01/83	12/20/83	52	52	100	10	3	
AD	DC	DBXV	01/02/84	01/02/84	06/07/85	98	86	87	10	3	
AF	MI	BLHG	06/23/85	08/26/85	04/16/86				11	1	

(14) (12) (2)

EDUCATION-HEALTH LINKAGE

E-H # MESSAGE:

1 CONSULT MEDICAL PERSONNEL REGARDING DEGREE OF CONTAGIOUSNESS AND WHETHER OR NOT SHOULD BE IN SCHOOL. (5b)

CONTACT:
MARGARET K JONES
MIGRANT NURSE
ROUTE 3 BOX 33
103 WEST PARK
BALD KNOB
AR 72010-0000
PH: 501-724-3361

1 CONSULT MEDICAL PERSONNEL REGARDING DEGREE OF CONTAGIOUSNESS AND WHETHER OR NOT SHOULD BE IN SCHOOL.
8 CONSULT MEDICAL PERSONNEL AND FAMILY REGARDING MEDICATIONS, PHYSICAL LIMITATIONS, AND CHRONICITY OF PROBLEM.

MIGRANT STUDENT RECORD TRANS.
DIRECTOR'S OFFICE - MSRTS
ARCH FORD EDUCATION BLDG
LITTLE ROCK
AR 72201-0000
PH: 501-371-1857

S E C O N D A R Y C R E D I T D A T A

MINIMUM GRADUATION REQUIREMENTS OF DESIGNATED HIGH SCHOOL
FOR PROJECTED GRADUATION IN 1988

ARBBDQ ARKANSAS DEPT OF EDUCATION MIGRANT EDUCATION LITTLE ROCK,AR 72201-0000 PH: 501-371-1853
**** STUDENT HAS DESIGNATED A SCHOOL FOR WHICH NO MGR DATA IS AVAILABLE, STATE MGR FOLLOWS FOR ARKANSAS ****
CONTACT: JOE BASIL, CORD MIG ED PH: 501-371-1853

REQUIRED SUBJECTS	GRADES TAUGHT	NO. TERMS REQ D	TYPE OF TERM	MIN. NO. CLOCK HRS. PER TERM	EXPLANATION (18)
AM HIST CIVICS	9-12	1	YEAR		1 UNIT
ENGLISH	9-12	4	YEAR		4 UNITS
HEALTH PE	9-12	1	YEAR		1 UNIT
MAJOR FIELD	9-12	3	YEAR		3 UNITS EXCLUDING ENGLISH
MINOR FIELD	9-12	6	YEAR		A UNIT IS A CLASS SCHEDULED FOR A MINIMUM OF 200 MINUTES LAB CLASS 275 MINUTES PER WEEK FOR 36 WEEKS :A TOTAL OF SIXTEEN UNITS ARE THE MINIMUM GRADUATION REQUIREMENTS
TOTAL		15			REQUIREMENTS ARE EFFECTIVE BEGINNING WITH THE GRADUATING CLASS OF 83

CLASS SCHEDULE FROM THE MOST RECENT REPORTING SCHOOL

(19)

SUBJECT	COURSE TITLE	SH	COURSE GRADE LEVEL	PARTIAL WORK % GR.	PARTIAL WORK CLOCK HRS IN CLASS	CREDIT GRANTED GR	CREDIT GRANTED NO. OF TERMS	TYPE OF TERM	TERM	YR
ENGLISH	FUNDAMENTALS II	AF	10					SEM	FALL	85
MATH	ALGEBRA I	AF	11					SEM	FALL	85
PHYSICAL ED	HEALTH	AF	11					SEM	FALL	85
SCIENCE	BIOLOGY	AF	10	40%	40			SEM	FALL	85

****CLASS SCHEDULE CONTINUED NEXT PAGE****

MOST RECENT REPORTING SCHOOL:
ANNA MICHEN ELEME
NORTH MAPLE STREE
FENNVILLE
MI 49408-0000

CONTACT: NON REPORTED

****EDUCATION RECORD CONTINUED NEXT PAGE****

(17)

0000002 AR RBFS 00002

DATE 06/02/86 — MIGRANT STUDENT EDUCATIONAL RECORD — PAGE 2 OF 4 — STUDENT ID 85223639 MNC

DROPOUT 04/16/86

JONES, MARY C

85223639 MNC

SECONDARY CREDIT DATA

CLASS SCHEDULE FROM THE MOST RECENT REPORTING SCHOOL****CONTINUED****

SUBJECT	COURSE TITLE	SH	COURSE GRADE LEVEL	PARTIAL WORK % GR.	PARTIAL WORK CLOCK HRS IN CLASS	CREDIT GRANTED GR	CREDIT GRANTED NO. OF TERMS	TYPE OF TERM	TERM	YR
SCIENCE	CHEMISTRY	AF	10					SEM	FALL	85
SOCIAL STUDIES	WORLD CULTURES	AF	11					SEM	FALL	85
VOCATIONAL ED	SHOP	AF	11					SEM	FALL	85

MOST RECENT REPORTING SCHOOL:
ANNA MICHEN ELEME
NORTH MAPLE STREE
FENNVILLE
MI 49408-0000

CONTACT: NON REPORTED

RECOMMENDED COURSES

ARBBOQ AMERICAN CITY SCHOOL DISTRIC 330 GRAHAM STREET AMERICAN CITY,AR 72335-0000 PH: 501 633 5380
SH LINE ID: AC
CONTACT NAME: DR. MARY JOY (21) TITLE: COUNSELOR PHONE: 501-371-1857

COURSE TITLE	GRADE LEVEL	TERM TYPE	TERM	YEAR	EXPLANATION
ENGLISH	10	SEM	FALL	85	NEEDS WORK ON ENGLISH GRAMMAR
SCIENCE	10	SEM	FALL	85	NEEDS BIOLOGY FOR GRADUATION
HEALTH	10	SEM	FALL	85	SEX EDUCATION IS REQUIRED BY THE DISTRICT

SECONDARY CREDIT ACCRUAL

GRADE 9

SUBJECT	COURSE	SH	PARTIAL WORK %	PARTIAL WORK CLOCK HRS IN CLASS	CREDIT GRANTED GR	CREDIT GRANTED NO. OF TERMS	TYPE OF TERM	TERM	YR	SCHOOL NAME	TELEPHONE
ENGLISH	ENGLISH I	AB			B+	1	SEM	FALL	80	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
	ENGLISH I	AB			A	1	SEM	SPR	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
FOREIGN LANG	SPANISH I	AD					SEM	SPR	82	D C PUBLIC SCHLS	
MATH	MATH	AB			C-	1	SEM	FALL	80	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
	MATH	AB			B	1	SEM	SPR	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
PHYSICAL ED	PE	AB				1	SEM	FALL	80	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
	PE	AB				1	SEM	SPR	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
SCIENCE	LIFE SCIENCE	AB			C-	1	SEM	FALL	80	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
	LIFE SCIENCE	AB			B	1	SEM	SPR	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
SOCIAL STUDIES	CIVICS	AB			A	1	SEM	FALL	80	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
	CIVICS	AB			A	1	SEM	SPR	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380

(20a)

GRADE 10

HOME ECONOMICS	HOME EC	AD					SEM	SPR	82	D C PUBLIC SCHLS	
MATH	GEOMETRY	AD					SEM	SPR	82	D C PUBLIC SCHLS	
	GEOMETRY	AC	79%	52			SEM	FALL	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
PHYSICAL ED	HEALTH	AD					SEM	SPR	82	D C PUBLIC SCHLS	
	PE	AC	95%	52			SEM	FALL	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
SCIENCE	BIOLOGY	AD					SEM	SPR	82	D C PUBLIC SCHLS	
	BIOLOGY	AC	76%	52			SEM	FALL	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380
SOCIAL STUDIES	AMERICAN HIST	AD					SEM	SPR	82	D C PUBLIC SCHLS	
	WORLD HISTORY	AC	99%	52			SEM	FALL	81	AMERICAN CITY SCHOOL DISTRICT	501-633-5380

(20b) (22)

AMERICAN CITY SCHOOL DISTRI — AMERICAN CITY AR 72335-0000
D C PUBLIC SCHLS — MIGRANT EDUCATION — 415 12TH STREET NW — WASHINGTON DC 20004-0000

****EDUCATION RECORD CONTINUED NEXT PAGE****

(17)

AR BRFS 00003

0000003

DATE 06/02/86 — MIGRANT STUDENT EDUCATIONAL RECORD — PAGE 3 OF 4 — STUDENT ID 85223639 MNC

JONES, MARY C — DROPOUT 04/16/86 — 85223639 MNC

SECONDARY CREDIT DATA

SECONDARY CREDIT REPORTING FORM

SUBJECT	COURSE TITLE	COURSE GRADE LEVEL	PARTIAL WORK: % GRADE	PARTIAL WORK: CLOCK HRS IN CLASS	CREDIT GRANTED: FINAL GRADE	CREDIT GRANTED: NO. OF TERMS	CREDIT GRANTED: CONSOLIDATED SH LINES	TYPE OF TERM	TERM	YEAR

INITIAL ENTRY OR CHANGE OF DESIGNATED HIGH SCHOOL

SCHOOL — CITY — STATE — YEAR OF GRADUATION

EDUCATIONAL SKILLS

MATH SKILLS

MATH SKILLS MASTERED (MOST RECENTLY REPORTED)

CODE	SUBTOPIC OR SKILL		DATE	SH
55501C	THE NAME OF A PARTICULAR QUADRILATERAL	IDENTIFIES THE QUADRILATERAL CORRESPONDING TO A PARTICULAR TYPE	10/01/81	AC
56101A	PARALLEL, PERPENDICULAR, OR INTERSECTING LINE SEGMENTS	NAMES THE LINES OR LINE SEGMENTS AS "PARALLEL," "PERPENDICULAR," OR "INTERSECTING"	10/15/81	AC
58201	PARALLEL AND NON-PARALLEL PLANES	IDENTIFIES PLANES WHICH ARE PARALLEL OR NON-PARALLEL	10/01/81	AC

MATH SKILLS UNDER STUDY (11)

56702	A COLLECTION OF DIFFERENT OBJECTS OR FIGURES POSSESSING SYMMETRY	IDENTIFIES THE LINES OF SYMMETRY IN OBJECTS OR FIGURES	AF

INPUT AREA

REPORT WHEN MASTERED

CODE	DATE

SKILLS UNDER STUDY CODE

READING SKILLS UNDER STUDY

CODE	SUBTOPIC OR SKILL	INSTR. LEVEL	SH
56004	READS MULTIPLE DIRECTIONS AND PERFORMS THE TASKS. (11)	06	AF
66001	TELLS IN OWN WORDS MEANING OF EXPRESSIONS SUCH AS A "BLANKET OF FOG" "SCREAMING HEADLINES". (8)	06	AF
03101	PONGA LAS FORMAS SOBRE UN TABLERO, ROMPECABEZAS DE 2 A 4 PIEZAS.	06	AF

SKILLS UNDER STUDY

CODE	INSTR. LEVEL

ORAL LANGUAGE SKILLS UNDER STUDY

CODE	LANG.	SUBTOPIC	SH
020	ENGL	SIMPLE	AF
040	ENGL	COMPLEX	AF
060	ENGL	MAIN IDEA (11)	AF
020	SPAN	SENCILLO	AF
040	SPAN	COMPLEJO	AF
060	SPAN	IDEA PRINCIPAL	AF

SKILLS UNDER STUDY

CODE	LANGUAGE

EARLY CHILDHOOD SKILLS UNDER STUDY

CODE	SUBTOPIC OR SKILL	SH
CO44	USES SELECTED ABSTRACT WORD MEANINGS CORRECTLY (11)	AF
AP16	GESTURES TO FAMILIAR PERSON	AF

SKILLS UNDER STUDY

CODE

****EDUCATION RECORD CONTINUED NEXT PAGE****

(17)

0000004 AR REFS 00004

DATE 06/02/86 — MIGRANT STUDENT EDUCATIONAL RECORD — PAGE 4 OF 4 — STUDENT ID 85223639 MNC

DROPOUT 04/16/86

JONES, MARY C

85223639 MNC

SUPPORTIVE DATA

CURRENT SUPPLEMENTAL PROGRAMS

NAME	CODE	DATE START	DATE END	HRS CUR

PREVIOUS SUPPLEMENTAL PROGRAMS

NAME		CODE	DATE START	DATE END	HOURS LAST	HOURS CUM	SH
E.S.O.L.	*	1	01/04/84			25	AD
TUTORIAL MATH	*	3	01/04/84			10	AD
TUTORIAL READING		4	01/04/84				AD

(10)

* - SERVICES PAID FOR PARTIALLY OR TOTALLY BY MIGRANT EDUCATION FUNDS

LANGUAGE(S) FOR INSTRUCTION

LANGUAGE	ASSESSMENT DATES FORMAL	ASSESSMENT DATES INFORMAL	SH
SPANISH	10/02/85		AF
ENGLISH		10/01/85	AF

(6)

SPECIAL TALENT

DATE	NAME	SH
09/30/81	QUILTING	AC
09/30/81	STORY TELLING	AC

(16)

TEST DATA

NAME	CODE	FORM	LVL	SCORE	Y	DATE ADMIN.	H	SH
CTBS - READING	00101	A	4	9.4	G	10/02/81	H	AC
CTBS - ARITHMETIC	00102	C	5	8.9	G	10/03/81	H	AC
CTBS - ARITHMETIC	00102	C	3	8.9	G	10/03/83	H	AC
CTBS - READING	00101	A	C	9.2	G	10/04/83	H	AC

(7)

SPECIAL EDUCATION CONTACT DATA

(9)

CONTACT:
BRANNON BERRY
SPECIAL PROGAMS SUPERVISOR
MONTCALM AREA SCHOOLS
STANTON
MI 49408-0000
PH: 514-384-4202 (04/16/86)

0000005 AR DOE 5 00001

DATE 06/02/86

MIGRANT STUDENT HEALTH RECORD

PAGE 1 OF 3 STUDENT ID 85223639 MNC

DROPOUT 04/16/86

JONES, MARY C

85223639 MNC

- HEALTH

BIRTH DATA

SEX = F
DOB = 04/16/67
VER = B
AGE = 19
MUL. BIRTH = 2
RACE = 5

(11)

PLACE OF BIRTH

SITE : CORMAY MEMORIAL HOSPITAL
ADDRESS: 1200 WESTERN AVENUE
CITY : CORMAY
ST/ZIP : AR 73201-0000
COUNTY : FAULKNER
COUNTRY:

LEGAL PARENTS

JONES, JOHN
JONES, MARY

CURRENT PARENTS

SMITH, PAUL
SMITH, ANN

(9)

HOME BASE

218 DAVIS ST.
CORMAY
AR 73201-0000

(13)

CURRENT RESIDENCE

204 C STREET NW APT 4
WASHINGTON
DC 20004-0000

(10)

RECENT HEALTH PROVIDERS

ID: ARBBDQ DATE: 10/10/85 ID: DCDBXV DATE: 01/10/84

AMERICAN CITY SCHOOL DISTRICD C PUBLIC SCHLS
330 GRAHAM STREET MIGRANT EDUCATION
AMERICAN CITY 415 12TH STREET NW
AR 72335-0000 ROOM 1004
PH: 501-633-5380 WASHINGTON
DC 20004-0000

(7)

CURRENT SCHOOL

ID: MIBLHG ENRL: 08/26/85
WDRL: 04/16/86
ANNA MICHEN ELEME
NORTH MAPLE STREE
FENNVILLE
MI 49408-0000

(12)

MIGRANT STATUS: 1 GRADE: 11
END OF ELIGIBILITY: 08/23/91

UNRESOLVED HEALTH PROBLEM LIST

ICD GROUP	CONDITION	PROB FREQ	EARLIEST INCIDENCE PROV	ENC #	DATE	LATEST INCIDENCE PROV	ENC #	DATE
	CHRONIC							
490	BRONCHITIS NOS	1				ARBBDQ	1	10/10/85
	ACUTE							
110	DERMATOPHYTOSIS	1				ARBBDQ	1	10/10/81
034	STREP THROAT/SCARLET FEV	2	DCDBXV	1	01/10/84	ARBBDQ	1	10/10/85

(2)

PATIENT HISTORY

V12 PERSONAL HISTORY OF CERTAIN OTHER DISEASES
10/10/81 ENC - 1 - REPORTED BY ARBBDQ
ICD - V12.01 - MEASLES
OUTCOME - YES - INDICATED A PERSONAL HISTORY OF THIS CONDITION
ICD - V12.02 - RUBELLA
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION
ICD - V12.03 - MUMPS
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION
ICD - V12.04 - CHICKEN POX
OUTCOME - YES - INDICATED A PERSONAL HISTORY OF THIS CONDITION
ICD - V12.06 - TB
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION
ICD - V12.3 - PERSONAL HISTORY OF DISEASES OF BLOOD AND BLOOD-FORMING ORGANS
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION
ICD - V12.4 - PERSONAL HISTORY OF DISORDERS OF NERVOUS SYSTEM AND SENSE ORGANS
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION
ICD - V12.41 - EPILEPSY
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION

V14 PERSONAL HISTORY OF ALLERGY TO MEDICINAL AGENTS
10/10/81 ENC - 1 - REPORTED BY ARBBDQ
ICD - V14 - PERSONAL HISTORY OF ALLERGY TO MEDICINAL AGENTS
OUTCOME - NO - INDICATED NO PERSONAL HISTORY OF THIS CONDITION

(4)

DATE 06/02/86 — M I G R A N T S T U D E N T H E A L T H R E C O R D — PAGE 2 OF 3 — STUDENT ID 85223639 MNC

DROPOUT 04/16/86 — JONES, MARY C — 85223639 MNC — HEALTH

FAMILY HISTORY

V17 FAMILY HISTORY OF CERTAIN CHRONIC DISABLING DISEASES
10/10/81 ENC - 1 - REPORTED BY ARBBDQ
ICD - V17.2 - FAMILY HISTORY OF OTHER NEUROLOGICAL DISEASES
OUTCOME - NO - INDICATED NO FAMILY HISTORY OF THIS CONDITION
ICD - V17.21 - EPILEPSY
OUTCOME - NO - INDICATED NO FAMILY HISTORY OF THIS CONDITION
ICD - V17.41 - HYPERTENSION
OUTCOME - NO - INDICATED NO FAMILY HISTORY OF THIS CONDITION

(8)

SCREENING DATA AND LABS

V70 GENERAL MEDICAL EXAMINATION
10/10/81 ENC - 1 - REPORTED BY ARBBDQ
ICD - V70.5 - HEALTH EXAMINATION OF DEFINED SUBPOPULATIONS
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL

V72 SPECIAL INVESTIGATIONS AND EXAMINATIONS
10/10/81 ENC - 1 - REPORTED BY ARBBDQ
ICD - V72.0 - EXAMINATION OF EYES AND VISION
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL
ICD - V72.1 - EXAMINATION OF EARS AND HEARING
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL
ICD - V72.2 - DENTAL EXAMINATION
CPT - D0120 - PERIODIC DENTAL EXAM
OUTCOME - ABNORMAL - FOUR CAVITIES

(6)

IMMUNIZATION DATA

V04 NEED FOR PROPHYLACTIC VACCINATION AND INOCULATION AGAINST CERTAIN VIRAL DISEASES

ICD - V04.01 - POLIO ORAL
05/21/75 ENC - 1 - REPORTED BY ARBBDQ ON 10/10/81
10/10/81 ENC - 1 - REPORTED BY ARBBDQ ON 10/10/81
BATCH - 1421C

ICD - V04.1 - NEED FOR PROPHYLACTIC VACCINATION AND INOCULATION AGAINST SMALLPOX
05/21/75 ENC - 1 - REPORTED BY ARBBDQ ON 10/10/81

(1)

LISTING OF HEALTH PROBLEMS BY PROBLEM TYPE AND ENCOUNTER DATE

UNRESOLVED CHRONIC

490 BRONCHITIS, NOT SPECIFIED AS ACUTE OR CHRONIC
* 10/10/85 ENC - 1 - REPORTED FOR ARBBDQ BY ARBBFS EH-LINKAGE - 008
ICD - 490 - BRONCHITIS, NOT SPECIFIED AS ACUTE OR CHRONIC
ICD - 786.2 - COUGH
CPT - 99013 - TELEPHONE CONSULTATION
OUTCOME - NORMAL
CPT - 99052 - MEDICAL SERVICES AT NIGHT

(2)

(3)

UNRESOLVED ACUTE

034 STREPTOCOCCAL SORE THROAT AND SCARLET FEVER
* 01/10/84 ENC - 1 - REPORTED BY DCDRXV EH-LINKAGE - 001
ICD - 034.0 - STREPTOCOCCAL SORE THROAT
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - UNDETERMINED - TAKE TWO ASPIRIN-CALL ME IN THE MORN

* 10/10/85 ENC - 1 - REPORTED FOR ARBBDQ BY ARBBFS EH-LINKAGE - 001
ICD - 034.0 - STREPTOCOCCAL SORE THROAT
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL

*****LISTING OF HEALTH PROBLEMS BY PROBLEM TYPE AND ENCOUNTER DATE CONTINUED NEXT PAGE*****

0000007

DATE 06/02/86

MIGRANT STUDENT HEALTH RECORD

AR DATA 00003

PAGE 3 OF 3

STUDENT ID 85223639 MNC

DROPOUT 04/16/86

JONES, MARY C

85223639 MNC

- HEALTH

LISTING OF HEALTH PROBLEMS BY PROBLEM TYPE AND ENCOUNTER DATE*****CONTINUED*****

UNRESOLVED ACUTE

110 DERMATOPHYTOSIS
10/10/81 ENC - 1 - REPORTED BY ARBBOG EN-LINKAGE - 001
ICD - 110.4 - DERMATOPHYTOSIS OF FOOT
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL - SCRATCH WHEN IT ITCHES

(5)

RESOLVED

052 CHICKENPOX
10/10/81 ENC - 1 - REPORTED BY ARBBOG EN-LINKAGE - 001 **RESOLVED**
ICD - 052 - CHICKENPOX
CPT - 90751 - PREVENTIVE HEALTH CARE,12-17
OUTCOME - NORMAL

* - SERVICES PAID FOR PARTIALLY OR TOTALLY BY MIGRANT EDUCATION FUNDS